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A phenomenological exploration: The voices of Middle Eastern ‘A’ level students and their teachers in a British curriculum International School in the Middle East.

A thesis submitted in partial fulfillment of the requirements for the Degree
Doctor of Education.

J. F. Shelton

University of Sheffield.

School of Education.

2016

Acknowledgements.

I wish gratefully to acknowledge the support, interest and encouragement given by my supervisor Doctor Simon Warren. I am also indebted to the school in which the research phase of this study took place, and to the staff and students who willingly gave of their time to participate. Not least Manal, Omar and Maha who have allowed me to take time out from family commitments for the last five years and enabled the financial resources to be available for me to embark on and complete this work. Finally to my late Father who by example instilled in me the values and sense of commitment and work ethic necessary to undertake research.

TABLE OF CONTENTS.

ABSTRACT.

Frequently it is assumed in developing countries that contemporary “Western” notions of teaching and learning are the role models to which education reform should aspire. It is often assumed that such models of education are the most up to date or “modern”, and as such are models of “best practice”. This thesis questions such assumptions and attempts to argue that “Western” models of education are increasingly subject to political influences and ideologies, distinct from being based on sound educational research. It is argued that such political agendas often lack a sensitivity of understanding toward differences in culture, learning expectations and preferences, compounded by western practitioners in developing countries who being immersed in their own cultural sensitivities, seek to project their ideas onto different cultures around the world, with little in depth understanding of the cultural norm into which they are transposing such ideas. As a consequence of this, it is suggested that there is a tension in the Kuwait context associated with the dissonance between attempts to modernise teaching and learning, and the local cultural expectations and preferences for teaching and learning. The purpose of this study is to investigate this suggested lived experience of tension, specifically associated with the implementation of How Science Works in the A-level Biology curriculum, as an example of a Western curriculum and teaching and learning intervention.

The findings of this study suggest in this cultural context that student participants hold an examination performance driven perspective on education, and have a preference for traditional teacher centered information based learning, with little importance attributed to the notion of education for understanding. Student and staff participants consider How Science Works components of the curriculum to be culturally and environmentally biased creating a sense of disadvantage for students in the host culture. There is evidence to suggest that student participants experience a sense of tension through constraints placed on their ability and willingness to engage with aspects of the curriculum by virtue of a perceived conflict with their religious convictions. These four main emergent themes create a sense of tension for students and teachers in the implementation of both the curriculum and contemporary student centered teaching and learning pedagogy.

INTRODUCTION.

To appreciate a painting or a piece of music is to be sensitive to how these expressions impact upon our emotions. There is no requirement for such experiences to serve any kind of ulterior purpose or usefulness. Such things are expressions of our humanity to be interpreted and enjoyed in whatever way speak to the individual. Education used to be regarded in a similar way, where the seeking of knowledge in its many different forms was considered a noble pursuit in its own right. I remember at the age of eleven asking my Art teacher if I could concentrate on copying a painting of a rowing boat on a beach. She was perfectly happy for me to spend several weeks on this instead of following the lessons with the rest of the class. I enjoyed the activity and learned much from the individual process of doing something that interested me at the time. I found out that I could paint, and that I had a feeling for expression through painting. Sadly contemporary education seems to have fallen prey to ever greater political influence. The process of education has in a sense been hijacked for political and economic purposes. There is a sense of political coercion impacting on not only what is considered to be useful knowledge, but also how such knowledge is to be taught. Knowledge has become subject to political definition, and teaching has become subject to ideological interventions that seek to impose what is considered to be allegedly “best practice”, largely ignoring the individual aptitudes that teachers bring to the profession.

Of central significance to this study is the suggested tendency that education reform in developing countries is subject to dominant Western notions and ideologies about teaching and learning. The process of educational modernisation in the developing world has become synonymous with “modern Western methods” of teaching and curriculum development. Of concern is the suggestion that such ideologies and methods fail to appreciate or give proper consideration to the sometimes significant cultural and social differences encountered in different parts of the world, and the impact such differences can have on learning style preferences and what constitutes an appropriate curriculum. Consequential to this is a suggested inherent tension in the process of education reform in the developing world that could be counterproductive to the intended outcomes. The study argues that the How Science Works

components of the disapplied British National Curriculum, which continue to be implemented in many schools outside the UK, constitute an example of Western interventions in the teaching and learning process and the science curriculum, and that there are significant tensions experienced by students and staff in this continued implementation which are detrimental to the academic success of the students in the Kuwait social and cultural context. The term tension is used in this thesis as an umbrella expression for feelings of apprehension, conflict, unease, anxiety, and stress associated with a general sense of discomfort relating to the teaching and learning experience.

Research question

Evolving from the discussion in chapters 1 – 4, the research question is:

How do students and staff involved with the Edexcel A-Level Biology course experience the suggested tension inherent in the implementation of the How Science Works components of the course specification?

Significance of the study

Tension associated with a dissonance between the ideologies held by teaching staff and between the teaching and learning methodology and methods practiced, and the teaching and learning expectations and preferences of the learners, can have a detrimental effect on the intended outcomes for students. If we do not understand the nature of such tension and its potential impact, then our efforts to implement curriculum change and teaching and learning changes for the better may be less effective than they otherwise might be. Much energy might be wasted in conflict and lack of cooperation. The Kuwait Development Plan for 2010 – 2014 identifies education as a salient lever in bringing about the country's transition to a post oil economy over the coming twenty five years. Attempting to understand a phenomenon such as the tension inherent in educational change, which has the potential to inhibit progress, is therefore of importance not only to educators, but also to Kuwait.

In chapter 1 I consider the political ideological influences on educational reform of some of the foremost governmental institutions in the context of knowledge economy development. The discussion reasons that education is susceptible to

being reconfigured as a service to economic activity through neoliberal political influence. The notion of corporate value systems intruding on the education process is considered, together with the idea that this influence presents an emerging threat to educational autonomy, integrity and the preservation of academic standards. The political identification of education as a major tool for policy leverage, and the consequential coercion of school and college management teams to embrace neoliberal thinking is suggested to place constraints on what is valued as knowledge, and this is suggested to be a further source of tension, especially where politically influenced Western notions of teaching and learning are imposed upon students in a radically different cultural context. Against the backdrop of educational globalization, the growth of International Schools and their suggested policy borrowing practices are discussed.

Chapter 2 seeks to understand the thinking and ideology that underpins the policies of the Kuwait Economic Development Plan (KDP). Emerging from this discussion is the suggestion that the underpinning policies of the KDP share common ground with neoliberal ideology and have been influenced by Western intervention. Specifically the discussion discloses how the Kuwait government has identified education as a policy lever in its strategy for economic reform, and thus education reform in Kuwait becomes subject to neoliberal influence and its suggested inherent tensions.

Chapter 3 explores further evidence for this suggested tension in the Middle Eastern collective cultural context emanating from Western neoliberal interventions. The discussion suggests there is substantial evidence for the existence of a collective cultural identity that is at risk under the influence of an increasing Western cultural presence in the Middle East, and specifically draws attention to the Kuwait context. This cultural dissonance is suggested to be largely responsible for the emergence of a perceived need to preserve and strengthen the Islamic identity and Arabic traditions, and a consequential impact on Arab attitudes toward contemporary issues of societal change, including education. Significantly attention is drawn to evidence in the scholarly literature that identifies important differences in the value systems of Arab and Western cultures, which impact on learning style preferences, suggesting there is a strong

socio-cultural influence acting on the learning process. This is demonstrated to translate into a preference for a more teacher centered learning experience, characterised by greater formality and rigidity commensurate with a more traditional approach to teaching and learning in the Arab cultural context. As such it is suggested that students who are immersed in a collectivist culture such as the Middle East tend to experience a sense of tension when exposed to the demands of contemporary Western teaching and learning methodology, where there is a lack of acknowledgement and in depth consideration for the differences in cultural sensitivities and expectations in the learning process by Western practitioners who remain immersed in their own cultural and ideological comfort zone. The consequence of this is a suggested scenario of well-meaning curriculum interventions that are ultimately less relevant and effective than they are intended or thought to be. Against this backdrop of Western neoliberal interventions in education, and international social and cultural differences, the challenges for the management of International Schools and their teachers are discussed, together with the notion of the significance of the hidden or absent curriculum.

In chapter 4, I explore the disapplied British National Curriculum (NC) as an example of a Western conceived intervention in the Middle Eastern context, some of the ideology of which continues to be implemented in the school in which this research study took place. The history of the disapplied NC development is considered, together with its aims and purpose in the context of its suggested link to knowledge economy facilitation in the global economy. The history of disapplied NC changes leading to the implementation of How Science Works (HSW) as an important strand of science education in schools is considered, contextualizing the specific focus of this research study (in the Edexcel A-level curriculum). The process of science curriculum reform that took place between 1998 and the implementation of the new science curriculum in 2006 is considered, together with evidence to suggest that this process was subject to significant political influence that had an allegiance to the importance of science education as a means of promoting the notion of the knowledge economy. Evidence is considered suggesting that implementation of HSW in the British context has been implicated with an experience of tension. Criticism of

the disapplied NC by the current UK government is addressed leading to the emergence of the new NC effective from September 2014 in UK maintained schools.

Chapter 5 explores the potential of a phenomenological methodology and method to provide a plausible insight into the suggested lived experience of tension inherent in the implementation of How Science Works in the Edexcel A-level Biology curriculum. The philosophical and conceptual foundations of phenomenology are considered, drawing upon the work and thinking of the philosophers Edmund Husserl and Martin Heidegger. Heideggerian phenomenology as a methodology that lends itself to seeking greater understanding of the experience of human existence is discussed. Heidegger was interested in the concept “Being” and the experience of “Being in the world”, and how people derived meaning in their lives. The phenomenological method used in the study together with the development of the interview protocol instrument, the analysis process and the findings are presented.

In chapters 6 and 7 a substantive discussion of the findings is presented.

Chapter 8 presents the conclusions of the study, addressing the strengths and limitations; contribution to knowledge; recommendations for policy, practice, and future research; and a reflection on the research question in the light of issues relating to globalisation and the knowledge economy.

CHAPTER ONE.

THE NOTION OF GLOBALISATION AND THE KNOWLEDGE ECONOMY.

Education has assumed a vital role globally in the process of knowledge based economy development. The ability of a nation to compete in the global economy increasingly depends on a more flexible and more highly educated human resource, and education is identified by the governments of developed nations as critical to economic success. Political influence on the education process has become more apparent as a result of this perceived increased economic significance of education by governments. This political impact on the education process, and the changing dynamics of the relationship between primary, secondary, and tertiary education with government has wide-ranging consequences for our understanding of how knowledge is created and what counts as knowledge or is valued as education. It could be argued that the nature of knowledge and education is being politically challenged in an attempt to subordinate education as a service for economic activity. Consequently it is imperative that educators have an understanding of this phenomenon because there are ethical, moral, social, and professional issues inherent within it, which are potentially a source of tension which could be detrimental to the education process.

This chapter explores these notions of the changing educational political socio-economic dynamic through a literature review in the field of globalisation and education. It addresses the main themes of the discourse on knowledge society and the emerging notions of neoliberalism and neocolonialism; the agenda of education reform of certain governmental institutions; and the political drivers for the advent of private tertiary education. Emerging from this discussion is the political foundation for further development in this study, and which as will be discussed in Chapter two directly impacts on Kuwait and its education system in terms of the country's stated medium and long term economic development plan.

1.1 The knowledge society discourse.

In 2005 some current transformations in society that are germane to education were outlined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Among these changes is a demand for a more flexible human resource in terms of ability and willingness to change occupation, place of work, and ability to learn new skills during the course of a persons' working life. Implicit in this prerequisite is an ability to engage in a process of lifelong learning. The traditional view that education is something largely undertaken during the early years of an individuals' life, and that higher education is the province of a select academically able minority has been brought into question (UNESCO, 2005). Fundamental to this challenge are the notions of Globalisation, Knowledge Society, and Knowledge Economy.

The idea of a knowledge economy is in fact just a theoretical concept with different interpretations, and one that is challenged by a number of authors. Roberts and Armitage (2008) argue that lack of knowledge is as much a characteristic of current economies as is knowledge. Smith (2002) suggests that the phrase knowledge economy is far from being a clearly defined concept and has become a commonly used figure of speech that serves as a convenient umbrella term when making reference to contemporary economic activity. Godin (2006) advocates that the Organisation for Economic Co-operation and Development (OECD) promotes the term knowledge-based economy as a strategy to accentuate the importance of science and technology to economic policy makers, with an emphasis on the creation, use and distribution of information. The Economic and Social Research Council (2007) in the United Kingdom and Snellman (2004) use the term knowledge economy as a descriptor of the tendency for economic success in the global economy relying progressively more on expertise, knowledge and the ability to use these commodities to optimize the potential for innovation. Roberts (2009) explores the features of the knowledge economy and questions the notion of the global knowledge economy, arguing that the definition of knowledge and what counts as knowledge depends upon who is defining it, and that the perspective of developed countries in relation to their economic activity overlooks the diversity of knowledge that exists and how different cultures around the world place

different emphases on the type of knowledge that is important. Sadly the excuse to avoid proper and full engagement with this important issue tends to be, in my experience, an assumption that if the school adopts a British style curriculum then it is incumbent upon the school to impart so called British attitudes and values regardless of the prevailing local cultural expectations and norms. This makes a contestable assumption that parents have chosen to send their children to the school because firstly they wish their children to be exposed to a contemporary “British” education, and secondly that parents have an in depth understanding of what constitutes a “British” education together with its assumed accompanying attitudes and values. It may well be that parents and students have a very different idea as to what constitutes a “British” education, and the attitudes and values they expect to be inculcated, compared to that of the contemporary “British” educational practitioner. This notion is the subject of further discussion later on in this thesis. (Illustrated in discussion below – Sperandio et al. 2009) Also, as has been suggested by Sancho (2015) the motivation of parents in this regard may well be equally associated with issues of social standing in the community and gaining a perceived advantage for their children’s future in the global market place.

The evolution of these notions of Knowledge Economy, Knowledge Society and Globalisation has a historical perspective and varying discourse. Valimaa and Hoffman (2008) clarify that their origins are both political and technical. Politically they are grounded in the perception of advanced nations that they need to be capable of competing on a much broader international and regional scale. Technologically advances in communications and information storage and retrieval have impacted on how we access knowledge and share ideas. Mokyr (2002) suggests this communications technology revolution is a significant stimulus for the generation of new knowledge and links this to sustained economic growth. Educationally one can appreciate advances in information and communications technology (ICT) impacting on the teaching process in terms of changing the nature of *how* we educate. One example is online learning communities and the advent of distance learning. Political influence however might be argued to have greater potential for transformation of the education process in terms of *what* is valued as knowledge and *why*. At the global level

information access and sharing becomes central to the discourse. Roberts (2009) discusses how this latter issue becomes problematic when the ability to access information depends upon the uneven distribution of ICT facilities across key regions of the world, citing significant differences between Europe and the Americas compared to Africa and Asia. Roberts and Armitage (2008) debate how commercially useful knowledge can become subject to corporate protection as it becomes more important to competitive ability, thereby restricting knowledge availability. According to Shiva (2007) this notion of the monopolisation of knowledge and restriction of access to those who can afford to participate is a growing global phenomenon with significant socio-economic importance.

This interconnected discourse and the governmental institutions that have influence on educational policies and practice is central to research concerned with the educational aspects of globalisation. According to Stromquist (2002) the field is comparatively recent, although the economist Theodore Levitt introduced the term globalisation in 1985 as a phrase to describe a phenomenon that influences the patterns of production, consumption and investment in an emerging global economy. Spring (2008) contends that the defining of the field of globalisation and education was synonymous with the launch of the journal Globalisation, Societies and Education, advocating globalisation and education as a field of study that takes account of global activity that encroaches on education. An example here might be the notion of economic growth being synonymous with investment in education. Embedded in this belief are the interrelated dynamics of economic progress, human capital and learning required skills, central to the global educational discourse. Roberts and Armitage (2008) identify several characteristics that they suggest characterise the knowledge economy in a global context including an emergent perceived significance of educational contribution to economic activity coupled with a growing knowledge impact and knowledge output as an economic product. Synonymous with this increased importance of knowledge are the further characteristics of commercialisation and control of knowledge as an economic resource. Implicit in these characteristics are an increasing demand for a more highly educated work force, and ICT assumes greater prominence.

The foremost theoretical viewpoints in the field of educational globalisation include the models of World Culture, World Systems, Post-Colonial and Culturalist. Lechner & Boli (2005) & Ramirez (2003) argue that the World Culture model is typified by a gradual absorption of the individuality of different national cultures into a world culture through the influence of dominant Western notions of education. An important premise of this theoretical perspective on the process of educational globalisation is that different cultures around the world are gradually merging into a distinct global culture. This overall culture it is suggested informs the development of school systems at the national level. What is significant to this study from the World Culturalist standpoint is an understanding that this suggested emerging global culture is becoming dominated by Western models of schooling which are gradually contributing to the emergence of common characteristics governing educational curricula and structures. A further important ideological premise inherent in this viewpoint is that people have the right to be educated and are considered all capable of being educated. Furthermore education is seen as a foundation to democracy and economic development, and the evolving commonality between world education systems is thought to be occurring because this model is believed to be the best that is currently available (Lechner & Boli, 2005; Ramirez, 2003). As such world cultural theorists argue that the dominance of education by Western ideas is becoming significant in the shaping of norms and values across distinctly different world cultures, and that this phenomenon is acceptable not only in terms of the emerging model of schooling but also its inherent philosophy of a human capital approach to the importance of education, the notion of which is discussed later on in this thesis. (Baker & LeTendre, 2005 cited in Spring, 2008).

In the wake of the trend in economic and educational globalisation, we have witnessed the genesis and growth of international schools. The term “International school” is one that seems to be in popular use amongst fee paying schools in the international setting who cater for students from a variety of ethnic backgrounds and nationalities. The history of the use of the term international school can be traced back over one hundred years (Sylvester, 2002). Keller (2015) notes that a commonly accepted definition of what constitutes an

international school remains elusive, whilst the growth in number of such schools continues to expand in the wake of the trend in economic and educational globalisation. The term ‘international education’ requires some consideration, since there exists some debate as to what it actually means. Sylvester (2002) notes that there is often an assumption that ‘international education’ is a self-explanatory term and people understand and hold a consensus as to its meaning. This assumption is questioned against a backdrop of the difficulty of limiting the term to a realistic field of vision within international education research. For example, international education could be understood to embrace issues of world citizenship and international understanding, or it might simply be used to describe a form of education that encompasses several nationalities of student within a single institution. Sylvester (2002) attempts to draw together historical accounts of the use of ‘international education’ in order to outline the conceptual landscape of the phrase and reflect on its varying definitions in a variety of contexts. The paper is intended to stimulate discourse on the meaning of ‘international education’ so that research in the field might come closer to a consensus as to what constitutes a defensible definition of the term. (Sylvester, 2002). Hayden (2006) argues that one of the most defining characteristics of international schools is their diversity, and that it is the communities that make up these schools, and the cultural context in which they operate that largely determine their nature. Hayden’s overview of the field of international education does not make allusion to schools that relate to any specific national system or particular set of criteria, such as benchmarks originating from the UK or USA. Rather, any set of common defining characteristics tend to include matters surrounding the multiplicity of ownership and governance models and the inherent issues of motivation behind the schools, which may marginalise educational concerns and interests; a dearth of regulatory structures and quality assurance other than those imposed by the host country; and a lack of provision or diagnosis for Special Educational Needs, which raises ethical implications where some international schools focus on filling available places without proper consideration for the needs of the clientele. Interestingly it is suggested that recognition value for parents regarding what constitutes a required characteristic of a good international school is its capacity to offer access to a recognised formal external examination system, and that this factor is more important to

parents than any form of accreditation that the school may have procured. (Hayden, 2006). Of significance to my work is the current lack of consensus as to what 'international education' in the context of an international school actually means. I use the term in this thesis to encompass issues of cultural sensitivity and preferences within a school that seeks to educate students of a predominantly Arabic ethnicity in an Arabic social and cultural setting. Whilst international schools tend to be associated with a diverse international clientele, it is noted (Keller, 2015; Hayden and Thompson, 1998) that the vast majority of these schools have an intake consisting predominantly of host country nationals who come from the wealthier sector of the society, and deliberately choose to patronize international schools in their country in preference to using the national state sector schools.

Sancho (2015) argues that the international school has in a sense become a vehicle for the privileged sector of society in developing countries in particular, to distinguish themselves from the emerging new middle classes. This suggestion is grounded in the observation that international schools generally impose exclusive academic fees, and that the clientele aspire to an education that will facilitate the pursuit of a successful career overseas in an increasingly globalised economy. It is also argued that the emerging new middle classes also assert their social class identities through investing in fee paying schools. Of particular interest here though, is the suggestion that international schools are increasingly embracing models of education based upon Western notions of teaching and learning exposing their students to a "global culture" and the development of skills that will allegedly facilitate an ability to work in the global economy. Fuller and Narasimhan (2006) discuss in particular communication and analytical problem solving skills valued by Western style curricula, and link such skills to the social and cultural capital required for success in a competitive economy. Parental preoccupation with finding schools which reflect such values in education in the international setting is considered, introducing the notions of social class and the ability to pay school fees as important parameters in the suggested competition for an education that is assumed to place their children at a selective advantage in gaining access to higher education and the prestigious professions. It is suggested by Fuller and Narasimhan (2006) that in many

developing countries those parents who have the means to send their children to fee paying schools hold an overriding priority for academic success, but it is noted that a growing number of 'middle class' parents are demanding more than this from the education system, suggesting that the wider curriculum exposure valued by Western style education (communication skills, problem solving skills, analytical skills, extra curricula activities, sporting activities, field trips, musical and arts activities) is being increasingly embraced by such clientele. As a result it is suggested that 'international schools' are beginning to reflect this changing parental demand in their character in the belief that a broader education will prepare children more effectively for successful participation in a globalised world. Of relevance to this thesis is the suggestion by Fuller and Narasimhan (2006) that such Western style notions of a valued education may not necessarily sit comfortably with the host culture. Fuller and Narasimhan (2006) conducted their research in India, noting that the Western values of argumentation and expression of individual opinion go against the cultural norm of a more deferential manner that children from traditional Indian families are accustomed to. The imposition of Western values in the curriculum requires children to communicate in ways that are unfamiliar and possibly even disturbing where a more egalitarian status quo of social interaction is not the normal expectation or preference. (Fuller and Narasimhan, 2006).

Roberts (2009) outlines how the emerging Western epistemology of the influential organisations of the knowledge economy has a tendency to value knowledge that has corporate value, serving the interests of business and commerce. This hegemony reduces the value attributed to forms of knowledge and ways of knowing esteemed by other cultures around the world. The value of what counts as knowledge and who defines the status quo is an issue that is brought into question in the global cultural context, and is of central significance to this study.

Wallerstein (2004) discusses how in the World Systems model, groups of countries with similar shared economic and political epistemologies wield significant influence on the economic and cultural values of surrounding nations in the region. A pertinent example here might be the influence of Saudi Arabia on the countries of the Gulf Corporation Council (GCC) which includes Kuwait, and

the GCC influence on the region further afield. World systems theorists reject the idea postulated by world cultural theorists that nation leaders select from the common aspects of the world culture in education because they seek to inculcate the best of what is current into their education systems. World systems theorists argue that education is being used deliberately as a political tool in order to empower some nations over others. From this perspective powerful core nations and economies such as the United States, Japan, and the European Union by virtue of their economic sway seek to exercise influence over surrounding nations through ideological educational influence and intervention. Education is seen as a powerful means by which to promote the norms and values of these core influential nations throughout the rest of the world, in particular ways of thinking and analysing that can have an allegiance to the capitalist monetary code of value, and in so doing legitimise the power of such nations (Wallerstein, 2004; Amove, 1980 & Clayton, 1998 cited in Spring, 2008).

Contrasting with the World Culture and World Systems models of educational globalisation Schriewer & Martinez (2004) and Steiner-Khamsi (2004) exemplify how the Culturalist model perspective places an emphasis on strong global cultural distinction and the sharing of global educational philosophies. Culturalist interpretations of educational globalisation emphasise the value of different forms of knowledge and ways of knowing inherent within the diversity of cultures around the world. This theoretical perspective acknowledges the value and existence of different forms of education and rejects the idea that education globally is being coerced by dominant political agendas, instead believing that the evolution of education emerges through interaction with the mass flow of different ideas around the world that constitute what counts as knowledge and what is valued as education. Apart from the human capital insight on education, this perspective recognises other important influences that are at play including religious, and that adaptation of world ideas occurs in the local context. Of interest to this study is the suggestion that importing ideas and policies from other cultures does not necessarily lead to a successful merging of educational systems, and that the emerging Western dominance and associated increasing global uniformity in education is the subject of significant criticism (Hayhoe & Pan, 2001; Little, 2003; Rahnema, 2001; Zeera, 2001 cited in Spring, 2008).

Apple (2005) and Olson (2006) debate the Post-Colonial model and the pursuit of political and economic interests by wealthier and more powerful nations to the impairment of those countries that are less influential in the global community. Post-colonial theorists argue that Western global domination of education is a direct legacy from the colonial era and is the result of European cultural imperialism. (Carnoy, 1974; Spring, 1998, 2006; Willinsky, 1998 cited in Spring, 2008). The demise of the colonial empires has been succeeded, it is argued, by different forms of post colonialism in the form of international governmental organisations (IGOs). The agendas and interests of IGOs in this respect are the subject of further discussion later in this chapter. The main premise here is that IGOs favour a human capital approach to education and identify education as a means to promote market economies and the interests of powerful nations and corporations through neoliberal interventions in the education systems. In this sense IGOs can be considered to be investing their interest in education in the belief that this will ultimately pay off with the production of a work force that is better suited to the requirements of powerful employers. Education becomes a part of the arsenal if you like, in the overall master plan to impose political and economic influence globally that serves the interests of wealthy western nations at the expense of poorer nations. An important view held by post-colonial theorists, and of significance to this study, is the contention that dominant forms of knowledge and education, and what is valued as knowledge arise through political and economic influence, and that these political and economic drivers are not necessarily intrinsically right socially, culturally, morally or educationally (Becker, 2006; Crossley & Tickly, 2004; Rhoads & Torres, 2006; Spring, 1998, 2006; Willinsky, 1998 cited in Spring, 2008).

Roberts (2009) illustrates the dichotomy of how the knowledge economy whilst associated with high levels of advancement and progress, remains part of a global economy that is also characterised by poverty and underdevelopment, and limited opportunity to make progress through the procurement of abilities that are needed in order to be able to engage effectively with the knowledge economy. In this sense it can be argued that the notion of a global knowledge economy is limited in that the knowledge economy is largely restricted to the economically advanced nations. Of pertinence to this study is the notion,

advocated by both Post Colonialists and Culturalists, that types of knowledge may be subject to supremacy by other forms of knowledge, and that what is defined as relevant and important knowledge becomes such through forms of political and economic control.

I have outlined the general field of educational globalisation and the main discourse and theoretical perspectives. It is useful to now consider the main governmental organisations operating within the global community and how they influence the discourse of education.

1.2 Governmental Organisations and Adjustment of Education.

Some powerful governmental institutions influencing the global discourse I have reflected on include the United Nations Scientific and Cultural Organisation (UNESCO), The World Trade Organisation (WTO), the World Bank, the Organisation for Economic Cooperation and Development (OECD), and the European Council (EC). To appreciate more comprehensively the impression such organisations have on the global educational discourse, it is expedient to reflect on their political philosophies and impetus concerning educational issues.

Lechner & Boli (2005) advocate that UNESCO together with its parent organisation the United Nations, and a range of non-governmental bodies involved with environmental issues and human rights are major critics of the neoliberal human capital ideological perspective on education, effectively opposing the view shared by the other establishments mentioned. Indeed Roberts (2009) draws upon published statistics supplied by UNESCO and other organisations when critically evaluating the extent to which the identified characteristics of the notion of knowledge economy in the global context are actually visible across the world. Reference is made to investment in education and research and development as indicators of knowledge input growth, noting that there are massive discrepancies in investment between Western Europe and North America compared with the Caribbean, Latin America, and Africa, highlighting the uneven distribution of knowledge input into the economy across different regions of the world. As far back as 1990 the UN launched the campaign Education for All. The perception that neoliberal thinking upholding minimal government interference in open free markets is synonymous with

globalisation and economic development can be thought of as a narrow perspective. Roberts (2009) argues that amalgamation between countries and commercial interdependence internationally are important aspects of a global economy rather than simply competitive economic activity.

The World Bank published a report in 1998 (Johnstone et al., 1998) which effectively outlined the banks' political agenda for the restructuring of education and in particular tertiary education, and addressed the reform of faculty thinking to favour the market orientation of education in terms of fulfilling the requirements of the economy as a producer of a human resource that is useful to business and commerce, and backing of privatisation of education institutions. According to Woodhouse (2011) the governance of this restructuring calls for "… the market orientation of tertiary education … and the principles of neoliberal economics …" (Woodhouse, 2011, p2). This ideology of educational organisation with its inherent knowledge economy and monetary orientated code of values is quite distinct from that of the traditional time honoured humanistic value system that has been characteristic of educational institutions for so long, i.e. the valuing of education and knowledge as a worthwhile pursuit in its own right that is not subject to the predetermined political requirements of the economy as a primary prerequisite. Why is the World Bank important in this respect? Collins and Rhoads (2010) cite instances of how the bank is significant in terms of financial resourcing of tertiary education in many developing countries, and exercises political control by requiring agreement to specific ideological conditions as part of the financial agreement, that serve the economic global interests of the advanced Western powers. A specific example mentioned by Collins & Rhoads (2010) is the Kecamatan Development Program in Indonesia, in which encouragement of neoliberal market principles and shifting of major institution ideology in favour of decentralization, privatisation, and competitive free market enterprise is a salient goal. What is interesting about this particular example is that part of the financial agreement conditions set by the bank is the acceptance and willingness of the client to implement privatisation of tertiary education. According to Roberts (2009) this shift in the World Bank focus from financing of infrastructure to a recognition of the perceived central role of education in knowledge economy development was motivated by an awareness by the bank

that many countries are not able to participate effectively in the global knowledge economy because they lack the resources to do so, in the belief that re-focusing on education would help to alleviate this obstacle to development, and draws attention to the fact that since the banks 1998 policy shift, the potential for education to facilitate participation in the global knowledge economy and to eradicate poverty in the developing world has still to be demonstrated.

European Union (EU) strategic goals relating to facilitating effective competitiveness in the knowledge based economy were clarified in the declaration of the European Council (EC) in Lisbon in 2000. According to Schleicher (2008) the declaration was concerned with facilitating a means of comparison internationally of adult proficiencies thought to be significant in human capital in the knowledge based economy, and the OECD was tasked with developing this comparison through its Program for the International Assessment of Adult Competencies (PIAAC). Among the key proficiencies identified by the EU and EC from the literacy perspective are abilities to communicate, research information, and contribute to knowledge. The program itself is envisioned to help facilitate the identification and quantification of variances in salient proficiencies, and to appraise the impact of skill deficits on the required economic activity. Of significance here is not only the identification of education as the envisaged skills producer, but where a deficit of skills is identified then PIAAC is intended to facilitate the development of policy measures that address the deficit, including through policy on education. Of relevance to this study is the identification of transferrable skills in communicating, and researching information as being key proficiencies. These are skills and learning outcomes that appear in the HSW statements of the UK Edexcel A-level Biology specification. Again, Roberts (2009) critically evaluates this neoliberal perspective pointing out that vast global human resources are occupied in subsistence agriculture, and as such are effectively not included in such standpoints on knowledge economy, with literacy rates varying widely in different regions of the world, further reiterating the dependency of participation in the knowledge economy on global location. Spring (2008) contemplates the reasons for the EC approaching the OECD in the development of PIAAC, and notes that the OECD represents largely Western economically advanced nations and

encapsulates a distinctly human capital attitude to education similar to that of the World Bank and the WTO. The OECD possessed extensive experience and expertise in the field with several education programs controlled by the OECD, including the Program for International Student Assessment (PISA), again intended to quantify proficiencies required by the knowledge economy, influence education curricula, and embracing a neoliberal perspective on education. (Spring, 2008). The EC Commission's annual working paper on the Progress towards the Lisbon Objectives in Education and Training, published in 2005 (Progress towards Lisbon objectives, 2005) advised that European education systems were not achieving the required proficiencies effectively, inhibiting economic efforts in the realm of knowledge economy competitiveness. Specifically these proficiencies for educational production included target benchmarks for a substantial increase in school leavers entering higher education, which places direct pressure on school science departments to achieve more examination passes and higher grades, and in the number of university graduates; and a drop in the university graduate gender imbalance in science and technology and mathematics. The changes which I have identified as being directly relevant to this study impact on the re-negotiation process of what is valued as education in terms of the shift from traditional factual based learning to skills based, and further illustrate in practice political and economic encroachment on the education process. This dynamic forms a part of the experience of tension in the Kuwait context identified in my research. (Commission proposes five benchmarks for education and training, 2003). Consequently a policy was called for by the Commission, which addresses the facilitation of a strategy stimulating inclusive lifelong learning. Inherent in the lifelong learning approach to education is an assumption that school education not only provides a basic factual knowledge based education, but also trains pupils in the transferrable skills required in order to be able to learn and continue to learn after their normal schooling period, in and alongside the work place.

Having addressed the political ideological perspectives of some of the key dominant governmental organisations that influence education in the knowledge economy, this next section of the chapter considers the implications for education.

1.3 Neoliberalism and the implications for Education.

It is evident that there is a global drive emanating from advanced Western nations that supports and encourages resourcing that is determined through mechanisms operating in the free market economy, and a discouragement of State control. Neoliberal thinking seems to be at the heart of contemporary knowledge economy development and assumes that the free market is self-reliant in shaping the efficient dissemination of fiscal resourcing of institutions. According to Collinge (2004), this view of economic development invades our education systems in terms of an evident expansion of privately funded institutions at all levels, and in particular at the tertiary level. Clark and Hermens (2001) support this observation, making reference to global education as an annual two trillion US dollar industry. Gupta (2008) discusses how education as a commercial enterprise had become worth over three trillion US dollars each year, and is set to expand with a likely one hundred and sixty million people by 2025 demanding tertiary education.

Clark and Hermens (2001) argue that this neoliberal perspective on education is impacting on the thought paradigms of the educational institutions themselves, with the management culture adopting an increasingly consumerist style and attitude in terms of their mode of operation and mission statement. One implication of this for education is a requirement for educational administrations to develop an understanding of corporate value systems and culture and to be able to engage with this culture effectively. In a sense education is becoming categorized as an economic commodity that not only makes a profit, but provides a product, an educated human resource, but educated in the skills and knowledge valued by and determined by the economy and those powerful governmental organisations that have the power and influence to determine the trends. The traditional philosophical approach to knowledge and knowledge creation can be perceived as having shifted from an autonomous climate of seeking knowledge and understanding as a noble pursuit, valued in its own right, to that of a direct source of competitive economic growth with its own set of revalued and politically predetermined skills, distinct from being educationally determined and valued.

The increasing trend of privatised education, particularly in the tertiary sector, seems then to be driven by neoliberal perspectives on globalisation and knowledge economy development, where industry and commerce through political influences on education establish new economic demands on the education system which it has not traditionally met in terms of types of knowledge and specific skills production. Alongside these demands there is also an infiltration of corporate values, previously not characteristic of educational institutions, associated with a primary necessity to compete in the free market economy and be profitable, thus helping to fulfill a governmental aspiration to reduce state funding of the ensuing rise in education costs. Gupta (2008) neatly sums up the implications for education:

> … diversification in lieu of homogeneity; decentralization and distant steering in lieu of centralization; marketization and competition in lieu of protection and complete dependence on the state; and new corporatism in lieu of strong sense of community prevailing among the academia. The issues at stake are 'autonomy versus accountability', academic freedom versus cost-centered management', … 'stress on improving quantity or quality of output without additional resources or inputs. (Gupta, 2008 p574).

These neoliberal influences on education can be thought of as being implicated in a sense of tension within the teaching profession, particularly where long standing autonomy and academic freedom is threatened or undermined, and a demand for higher academic standards in terms of examination results pervades a system where resources and conditions are often below par, and arguably at the corporate management level understanding of the complex factors that influence student performance is limited through a non-educational professional background. The school in which the research phase of this study took place is a prime example in that it is part of a conglomerate of businesses, many of which have nothing to do with education, which are administered from a remote Head Office with executive powers over the organisation and running of the school, powers that were traditionally the province of the Head-teacher.

Given this global economic backdrop to education, it is suggested (Sancho, 2015) that "international schools" are experiencing a twofold pressure or tension associated with their development. Firstly because international schools are generally fee paying, private enterprises, there exists the constant commercial

pressure of competition in terms of marketing the school and promoting the marketability of the students who graduate from the institution in terms of their success rate in gaining entry into revered institutions of higher education. Secondly however, and of significance to this study is the notion that there is an experience of tension associated with the discomfort of being exposed to Western ideas and values that potentially threaten the foundation of cultural values on which the host society is based. Tabulawa (2009) critically analyses contemporary education reform policies in Botswana and reflects on suggested policy contradictions and paradoxes. The country's response to globalisation through its 1994 Revised National Policy on Education (RNPE) is considered, in terms of the extrinsic political objectives of producing a work force that is more suited to the changing demands of the economy. Tabulawa (2009) argues that changes in the curriculum and teaching and learning methods were envisaged to encourage the development of learners who would be able to work collaboratively and think autonomously, with attributes such as initiative, problem solving skills, and critical thinking skills. In order to realise these attributes a learner-centred pedagogy became the official preferred method of teaching embraced by the RNPE (Tabulawa, 2009 p93).

> … the pedagogy is viewed in Botswana as a vehicle for developing a preferred kind of society and citizens. It (learner-centred pedagogy) is the nexus between education and the broader political principle of democracy. This aspect of the pedagogy is not unique to Botswana. (Tabulawa, 2009 p93).

Of relevance to my study is the understanding that learner-centred pedagogy is more than an intrinsic educational ideal, but is also a political and economic artifact, since learner-centred pedagogy can be viewed as a vehicle to drive societies and economies toward knowledge based economies. Tabulawa (2009) poses the all-important question of how effective can such politically determined educational initiatives be in delivering the type of preferred citizen and learner envisaged by the knowledge economy? It is pointed out that because of the inherent political nature of education reform, the exact nature of such initiatives and their outcomes will be influenced by the socio historical settings in which they are implemented. The distinctive cultural norms found in different societies around the world will determine to a significant extent the actual

conceptualisation of the phenomenon of pedagogical and curriculum reform. Tabulawa (2009) reminds us that learner-centred pedagogy is value-laden carrying embedded epistemological assumptions that may not sit comfortably with the sociocultural context of the host society into which it is being implemented. Furthermore, because of this possible lack of congruence teachers may experience tension where they are required to adopt such pedagogy (Tabulawa, 2009 p98). Of interest to my study is the suggestion that learner-centred pedagogy is more likely to be attractive to policy-makers at national level because of its social and economic appeal rather than any proclaimed intrinsic educational value (Tabulawa, 2009 p99). In the Botswana case it is noted that policy texts associated with the RNPE advance social and political arguments for learner-centred pedagogy and curriculum reform, but do not include any robust arguments for the intrinsic educational or cognitive value of such teaching and learning strategies. Rather, the real value of pedagogical and curriculum reform:

> … lay in its value as a legitimating device or justification for linking general education to the world of work. (Tabulawa, 2009 p99).

It is also noted that those international schools where an adherence to the requirements of a formal academic external examination system have been maintained, are less likely to adopt learner-centred pedagogy. Didactic authoritarian teaching seems to be the default strategy for teachers, where success in formal external examinations is considered paramount for the credibility of the school and the teacher. (Tabulawa, 2009 p101). This notion is the subject of further discussion later on in this thesis.

Keller (2015) draws attention to the existence of several strands or dualities of tension that are suggested to exist in the international school context. Of relevance to this study is the juxtaposition between advocates of traditional education and those of innovative education. Keller (2015) argues that international schools embody the tensions inherent in the duality of post-colonial theory and that of global civil society. Keller (2015) encapsulates the global civil society or internationalist perspective, as one in which the:

> …agenda pursues world peace, understanding between nations, and responsible world citizenship. The pedagogical approach is process oriented, frequently including experiential education leading to character

> building. Commonly espoused values include pluralism, equity, and justice. (Keller, 2015 p906).

Post-colonial perspectives place emphasis on gaining admission to higher education but an important overriding motive underpinning this perspective is the achievement of economic success linked to education, as previously discussed. Here skills based student centred learning is assumed to promote the development of attributes such as problem solving, innovation, collaborative team work, and flexibility. The possession of these attributes in the work force is perceived as being vital to successful economic competition. The issue here I would suggest is the evident domination of contemporary Anglo-American attitudes and values inherent in this approach, and how appropriately these attitudes and values sit within the host culture. In addition to this there is also the traditionalist perspective on education with a pedagogical approach that is oriented toward success in tests and formal examinations, but through a pedagogy of teacher lead, information based learning that places less emphasis on those skills assumed to promote economic success (Keller, 2015). Whilst these notions appear to be polarised, I would suggest from experience in the international context that the experience of tension arises through a desire to incorporate elements of all these perspectives in their approach. So for example in a global civil society type of approach, there remains a need for academic success in an external formal examination system if the school is to retain its credibility. Hayden (2006) suggest that the perceived importance of external examination systems pervades the school community, regardless of the pragmatic or idealistic aspirations the school may aspire to. Likewise in the post-colonial perspective and in the traditionalist perspective there is now a need to acknowledge elements of the global civil society approach.

Rizvi and Lingard, 2010 (p96) note that in the global attempt to readjust the quality and quantity of human capital, there has been a political focus on curricula, assessment and testing, and that this focus impacts on the secondary school level in terms of trying to find ways to meet the needs of a much wider pupil cohort in terms of academic ability than has perhaps traditionally been the case. It is also noted that there has emerged a greater pressure on secondary

schools generally to retain pupils into advanced level studies and increase the number of students entering higher education.

Woodhouse (2011) suggests that what is valued as knowledge in the knowledge based economy significantly differs from the traditional university education in one very important respect, that of the nurturing of critical thinking, arguing that the foundations of knowledge valued by contemporary neoliberal influence lack clear criteria for "… determining truth from falsehood, and is reduced to what maximizes stockholder value." (Woodhouse, 2011, p7). An example of this perspective, outlined by Clark & Hermens (2001) is the view that the traditional university is not flexible enough to respond to the demands of the knowledge based economy as a consequence of its values, organizational processes and historical evolution. Consequently many large commercial enterprises have addressed skills requirements by setting up their own education facilities in the form of training departments, in some cases misappropriating the name of 'university', to provide a form of training with a narrow discernment of what is valued as knowledge. A vivid example of this trend is the degree of "Bachelor of Hamburgerology" awarded by the McDonalds corporate "university". This example is one of many outlined by Clark & Hermens (2001).

Tuunainen (2005) provides a useful analysis of the change taking place in tertiary education, elucidating two broad viewpoints. On the one hand we have the transformation of the creation of knowledge through research activities influenced by corporate institutions, where emphasis on the application of knowledge commensurate with political and economic objectives assumes greater importance at the expense of academic autonomy and interests. However, the other point of view is perhaps of greater significance to this study, that of the potential of academia and education generally to exert its own influence in response to the emerging political, corporate, and educational dynamic. Education arguably possesses one of the most endowed human resources and has a responsibility to preserve and sustain the principle of integrity where the more deleterious influences of neoliberal ideology threaten to undermine it. With astute leadership, the education profession is probably capable of galvanizing a formidable resistance, but of course, inherent in this belief lays a source of tension in the process of resistance.

In chapter four I argue that certain specific ideological interventions in the secondary school curriculum can be traced back to neoliberal political influences associated with knowledge based economy development and competition in the global economy, and in the research phase of this study demonstrate that such interventions are a source of tension in a cultural context such as Kuwait, that is different in significant ways to that of the Western cultural context in which these neoliberal interventions have been developed and then rolled out in a neocolonial wave of global influence. In the following chapter, I discuss my reading of the Kuwait Economic Development Plan, 2010 -2014, suggesting how the country's economic trajectory embraces neoliberal ideology, and how education in common with other knowledge based economies has been identified as a policy lever for economic development. In subsequent chapters I develop this perspective on education and discuss how the development of the disapplied UK National Curriculum and the incorporation of HSW into the science curriculum can be viewed as a neoliberal political intervention in the education process. The discussion also suggests how HSW was implicated in an experience of tension during its implementation in the UK context, and forms the focus of the research in this study.

Rizvi & Lingard (2010) in their comprehensive discussion on globalisation and global education reform suggest that global educational policies have adopted broadly similar characteristics through processes of policy borrowing by national governments, underpinned by a political neoliberal influence, and that this process is encouraged by intergovernmental organisations (IGOs) such as the OECD, UNESCO, EU, and the World Bank (previously discussed). Indeed it is suggested that the OECD has become an advocate of neoliberal policy underpinned by ideological beliefs about the organisation and control of society (p38), whereas in the past the OECD was regarded more as a forum for the discussion of different ideas and perspectives on policy. It is argued that the majority of international conventions on economic development implicating education to which governments lend credence, far from being neutral has a neoliberal agenda (Rizvi & Lingard refer to this as a "neoliberal social imaginary" p40) that not only seeks to coerce education reform in the context of economic competitiveness in a specific way, but also to place the underlying assumptions

about the nature of people and society on which neoliberalism is based in a position such that it is difficult to challenge and criticise these assumptions. It is contended then that the process of policy borrowing in education takes place in the context of a range of international and regional agreements that are significantly influenced by IGOs and coerced by neoliberal ideology (p39-40). What is interesting about this contention, and of relevance to this study, is the suggestion that such agreements limit national autonomy in the realm of education policy making, for example in the deregulation and privatisation of education, but also in the process and content of education, because there is a supposedly unquestioned assumption that issues of poverty and the redistribution of wealth for example can only be effectively addressed through the politics of market orientation, and that economic competitiveness in the global market economy essentially requires the reconfiguration of education in order to provide a suitable work force to realise such a competitive advantage. Rizvi and Lingard (2010) argue that this process of coercion by IGOs has resulted in a global perspective on economic development and implicit education reform that is essentially neoliberal in character underpinned by a common acceptance of the capitalist ideology of the salience of wealth accumulation. These organisations have been and are significant in influencing globalisation discourses and significantly:

> … their **supposed** (my emphasis) implications for rethinking educational values… such organisations have become major sites for the organisation of knowledge about education, and have created a cajoling discourse of imperatives of the global economy for education. (Rizvi & Lingard, 2010 p79).

It is noted that there is now a status quo of policy borrowing across the globe with an unprecedented level of direct transfer of educational ideas, processes and curriculum content, in an effort to reconfigure education to comply with the "**alleged**" global market economy needs. (Phillips & Ochs 2004 cited in Rizvi & Lingard 2010). For me Rizvi & Lingard (2010) eloquently articulate the current status quo in education and its implications as follows:

> A new human capital theory has informed discussions of educational values. In its most radical form the new human capital theory … demands a reconceptualization of the very purposes of education. OECD (1996) has suggested education now needs to produce different kinds of persons

> who are better able to work creatively with knowledge, are flexible, adaptable & mobile, are globally minded & interculturally confident & are lifelong learners. What this view implies is that learning for learning's sake is no longer sufficient, and that education does not have any intrinsic ends as such, but must always be linked to the instrumental purposes of human capital development and economic self-maximization. (Rizvi and Lingard, 2010 p80).

This limited view of education manifests itself in our changing school curricula through specifications that now require teachers to engage with and develop in their pupils a set of broad generic skills that are allegedly transferrable, including problem solving, communication, working independently, accepting responsibility for decisions, and the ability to source factual information effectively. In knowledge economies the ability to master factual information and theories becomes diminished in importance. This mantra is echoed in the skills based outcomes stipulated in the HSW component of the A level biology specification that forms the subject of this study.

So is there a problem with this perspective on education? Rizvi & Lingard (2010) suggest that there are several issues that need to be addressed. It should be noted firstly that whilst there is an argument that purports the existence of a hegemonic neoliberal imaginary that is currently dominant, there is also a collective resistant dissent to it (p79). The implementation of neoliberal principles and their accompanying assumptions about the changing nature of what education and knowledge should be cannot occur within a cultural vacuum. The global processes at play are subject to the influence of local national political sensitivities and cultural traditions, and so these different contexts affect the way in which global pressures are engaged with (p42). The point is made that ideology originating in a specific cultural context, when transposed cannot wholly take with it that contextual understanding and sensitivity into a different cultural context. As such it cannot be assumed that policy ideas will be received and interpreted in the way that is originally intended (p39). There have been concerns and objections, for example the 2001 Porto Alegre Declaration of activist groups in South America (Gret & Sintoma, 2005 cited in Rizvi & Lingard, 2010 p41) regarding education quality control, and erosion of particular cultural values that are important in defining and sustaining local customs and traditions, and support the community.

Ledger (2014) analyses curriculum policy processes in the international school setting and draws attention to the complexity in this dynamic, specifically associated with the adoption and implementation of the International Baccalaureate Primary Years Programme. The findings in this study suggest that local nuances in interpretation and implementation of curriculum policy play an important part in the overall process and have a significant influence on why a particular curriculum programme is adopted and how it is implemented, drawing attention to the notion that interpretation and implementation associated with policy borrowing from other countries and cultures cannot be assumed to be similar to what was originally intended in the development of such policies.

Sperandio et al., (2009) discusses how this process of policy borrowing by countries worldwide and with quite different cultural norms and expectations has become common place in the drive to reform school systems and implement policies of alleged “best practice”, noting that much of the scholarly literature tends to focus on the decision processes at the national government level. The importation of a character building education programme from the United States into an international school in Kuwait was analysed, focusing on the challenges experienced in the process at the school level, as part of a wider study of Kuwaiti international schools and intercultural relationships. Douglas (2005) exposed how differences in personal beliefs and values created discord and tension in the Kuwait school as a result of an inability to discuss these differences. The importance of recognising that an international school community is a place of diverse personal value systems is underscored, and that school administrators need to have an understanding of these differences. Importantly Douglas (2005) notes that:

> Curriculums adopted in isolation and given no opportunity for open communication are susceptible to animosity, lack of acceptance, and poor implementation. (Douglas, 2005 p2).

The programme had been developed in the US for use in public schools with diverse student populations, and adoption and attempted implementation was studied in the Kuwait school which had a predominantly Muslim student body. This study (Douglas, 2005) is of importance and relevance to my thesis because it illustrates the complexity of curriculum policy borrowing processes operating at

the school level in the cultural setting of the country in which my research took place.

At the level of the school owners, Douglas' (2005) study reveals an evident motivation for importation of the programme driven by its perceived and assumed symbolic influence relating to the projection of an international image for the school. There was an assumption that this image would enhance the standing of the school against its competitors, and signal direct association with a country and educational system that was again assumed to be held in high regard by the local community. In particular the decision to adopt the programme was closely linked to the school achieving accreditation by US agencies. What became apparent was that this superficial driver for policy borrowing failed to recognise or understand the ensuing tensions that this decision was to create in the school community. The study revealed that the adoption of this programme had no significant bearing at all on the parental choice of international school. Rather it became apparent that the parental choice of a good school had more to do with English language being the primary mode of instruction, delivered by foreign-trained staff using English language text books of foreign origin. In particular the parents were influenced by a desire for gender segregated education. (Douglas, 2005).

At the teaching level the difficulty of acquiring and putting into practice the pedagogical skills required and envisaged by the curriculum policy by those staff who taught the programme appeared to be underestimated and poorly understood. A major factor in this difficulty was that the school management had directed that only Muslim teachers were to be involved in the teaching of the programme. The reason for this appeared to have been a concern that the cultural and pedagogical foundations of the US programme might contradict or offend Islamic values, thereby precipitating complaints from parents and students. The teachers being aware of this potential difficulty and at the same time needing to be seen to perform by the management, essentially reduced the programme to information imparted in the local culturally expected way, discouraging pedagogical approaches that were originally envisaged to stimulate thought and discussion relating to character building as understood in the US cultural context. So the teaching of the programme was compromised essentially

by the influence of local cultural sensitivities both in terms of staff that the curriculum policy envisaged should be involved (school wide) and in pedagogical approach. Significant tension arose between Muslim and essentially none Muslim western staff centred on cultural and religious misunderstandings. (Douglas, 2005).

Sperandio et al., (2009) makes an interesting comparison between policy borrowing at the school level and at national government level, suggesting that the motivation for educational policy borrowing at these two levels has similarities. It is suggested that such issues as a need to be seen to be conforming to assumed perceived “best practice”; marketing of the education system; increasing perceived status of education systems; and enhancement of credibility are important drivers in the policy borrowing process. Frequently during the process the decision to import is made at the none-teaching level taking little or no account of the possible implications at the teaching level, where the main challenge is to be found in terms of cultural diversity. Often there is no evidence to suggest that the school community or parents have identified a need for change. Most importantly the envisaged policy borrowing and implementation may not be entirely congruent with the host culture, a factor that possibly is often little understood or recognised. There is frequently an assumption that the importance of recognising cultural contexts and contextual evolutionary policy development can be marginalised. It needs to be born in mind that the cultural context in which policies evolve will have a profound effect on the nature of such policies and their appropriateness for the context into which implementation is intended. It therefore cannot be assumed that similar outcomes claimed by borrowed policy will be the end result. Clearly the interpretation of meanings and understandings from different cultures cannot be assumed to be the same in alternative educational settings.

Whilst neoliberalism has become a dominant force in the development of contemporary educational values, it is suggested there are different ways of interpreting the new global village other than through the neoliberal lens (p79). The neoliberal perspective makes contestable assumptions about human nature and society. Society is assumed to be essentially and therefore necessarily competitive, thus sustaining the argument that market principles are the best

means by which social efficiency can be achieved and maintained. Education has in a sense been reduced to a commercial enterprise in the sense that it is only useful in terms of developing human capital characterised by a set of politically determined transferrable skills that can be utilised in the market economy. Within that economy the assumption is made that it will be self-perpetuating because human nature is considered to be basically selfish, motivated by the desire for accumulation of personal wealth (p86). It is suggested that there are other ways of accommodating the global shift in connectedness that do not necessarily have to give priority to economic concerns at the expense of human interests, and as such would have implications for rethinking the neoliberal educational values that are essentially linked to economic competitiveness at the moment (p91).

This assumption that the principles underpinning neoliberalism and its influences on education are generic and universally applicable is challenged because it is suggested such principles embody ideological philosophical assumptions about society and its organisation that are not necessarily the case in different cultures around the world. Neoliberal ideology is located within a “self-referential framework” where the principles of efficiency and productivity are assumed to be incontestable. The possibility that these principles may not be innately desirable because they can conflict with other equally important humanistic considerations, such as the noble pursuit of knowledge for its own sake, does not seem to bear consideration in the drive for economic advantage. It is argued that unlike commercial enterprise, schools should have complex goals that venture beyond the narrow confines of an educational ideology that has been politically determined to serve economic requirements. Consequently it is far more difficult for a school to measure its effectiveness and contribution to society if it is to be accountable beyond the confines of fiscal efficiency and measurable productivity. The neoliberal notion that the success of a school can be simply measured in terms of its examination performance, or even in the extent to which progressive skills based student centered teaching takes place is really a very narrow point of view, but we see precisely this constraint in the neoliberal imaginary, with efficiency in such terms being regarded as an essential fundamental outcome. It is difficult in the current climate to argue against such notions of efficiency and

performance and so these neoliberal principles become self-evident and cajoling. I would even go so far as to suggest that many of our entrants into teaching who have followed a short post graduate teacher training have bought into the neoliberal imaginary through a process of ideological indoctrination, believing that their new found principles of practice are founded on years of educational research that demonstrates the superiority of such methods, but with little if any understanding of the political influence that has contributed to the evolution of the contemporary educational mantra they subscribe to. However, it is only when we question these basic assumptions against the more humanistic considerations, such as the role education can play in the building and sustaining of different cultural communities, that their assumed self-evident worth becomes less convincing (p89).

Finally we need to think about how the emphasis on efficiency at the expense of other values has contributed to a situation where a good many educators are experiencing a sense of marginalization and subjugation. There is a sense that educators have lost their professionalism and autonomy as political influence over education has gained sway. The pressures of mechanisms of accountability that might be considered unrealistic since there is an expectation for specific ideological outcomes that are difficult to meet by virtue of a requirement for efficiency and effectiveness in contexts that are more culturally, politically and economically complex have taken their toll. It is suggested that the hegemony of neoliberalism whilst having benefited some countries in terms of the limited perspective of economic growth, has not been successful in others. Of equal importance is the suggestion that there has been an erosion of the cultural traditions that sustain communities in parts of the world where the implementation of the neoliberal canon has been attempted (p91).

1.4 Summary.

The main theoretical standpoints on educational globalisation have been outlined, together with the emergent discourse, and the ideological influence of some of the foremost governmental institutions on educational reform in knowledge economies.

The notions of mass tertiary education, privatisation of educational institutions, and the intrusion of a corporate value system into education have been outlined as one of the major consequences of neoliberalism in knowledge economy development, with an emerging potential threat to educational autonomy, integrity and the preservation of academic standards. This new relationship dynamic between politics, economics, and education presents an opportunity for educationalists to rise to the challenge in defending the higher values and historical virtues on which their profession is founded. The discussion reasons that education is susceptible to adjustment as a service to economic activity through the neoliberal influence pervading educational globalisation and knowledge economy development, in the sense that there is a political identification of education as a major policy lever, with a consequential coercion of educational institutions to embrace neoliberal thinking in their day to day administration and perception of their collective role in society.

It is suggested that the constraints placed on what is valued as knowledge, education, and the generation of knowledge, is a possible source of tension, especially in the neocolonial sense of politically influenced Western notions of teaching and learning being imposed upon different cultural contexts around the world. In this regard the suggested tension experienced in developing international schools has been considered, making reference to commercial competition; the exposure of international school students to Western ideas and values by virtue of the Anglo-American domination of international school management and staff; the juxtaposition between traditional and contemporary values in education; and the issues surrounding curriculum and pedagogy policy borrowing, where the original intentions in the development of curricula and pedagogy are not necessarily interpreted as intended in the host culture. In

chapter three I discuss some of the evidence in the scholarly peer reviewed literature that lends support to this notion in the Middle Eastern context.

In the following chapter, I suggest how Kuwait and its education system can be considered to be directly implicated in knowledge economy influence through a discussion of the Medium Term Kuwait Development Plan (KDP) of 2010 – 2014 which forms the first in a series of comprehensive development phases, and how this document implicates education reform as a part of this strategy. This relates to my research from the perspective of a suggested tension being inherent in the process of education reform in alternative cultures resulting from notions of political intervention that have their origins in a Western political, social, and cultural context.

CHAPTER TWO

THE MEDIUM TERM KUWAIT DEVELOPMENT PLAN FOR 2010 – 2014.

This chapter contextualizes the Medium Term Kuwait Development Plan (KDP) of 2010 – 2014 through a brief consideration of the policy document. The discussion seeks to understand the essential thinking and ideology underpinning the policies within the document, and suggests how these policies share common ground with the neoliberal global political drivers addressed in the previous chapter. Political interventions in the Kuwait education system emanating from the policies of the KDP are considered, disclosing how education in Kuwait has been identified as a significant policy lever in the facilitation of strategic government targets for economic development.

2.1 Background.

Located at the North West tip of the Arabian Gulf, Kuwait has occupied a strategic position for trade for centuries. Sea trade was established with India, transporting cargoes across the desert to the Mediterranean. With the discovery of oil in 1938, and subsequent independence from the status of British protectorate in 1961, Kuwait joined the Arab League of Nations and nationalized its oil industry in 1975. The oil revenues have facilitated relatively rapid transition to a modern infrastructure, and by 1981 Kuwait had established itself as a modern economy and was instrumental in founding the Gulf Cooperation Council (GCC). The vast oil wealth, estimated to be the fifth largest in the world, is the main driver of the economy. (CIA, 2012). The population is small, at only 3,268,431 persons according to the Central Statistical office, and Kuwaiti nationals are in a minority at 1,128,381 in June, 2012, with the remaining population comprising of expatriates of various nationalities (Kuwait Government online, 2013).

At the invitation of the Kuwait government in March 2010, The Work Foundation and London School of Economics and Political Science (LSE) partnership sent a group of experts to Kuwait. They were tasked with making an assessment of how our current understanding of knowledge economy operation might be

appropriate as a model for economic development in Kuwait. The Work Foundation is an alliance with Lancaster University focusing on economies and the facilitation of the impact of policy advice arising from research based analysis (The Work Foundation home page, 2013). LSE is home to the Kuwait Programme on Development, Governance and Globalisation in the Gulf States (KPDG), and the KPDG is a sponsor of the Work Foundation. The Kuwait Foundation for Advancement of Sciences (KFAS) supports the KPDG. The British government together with a number of public organisations and British companies sponsors The Work Foundation and LSE partnership. This partnership is a multimillion pound research project with a focus on the functioning of knowledge economies, and makes contributions to the data used by the British government in the formulation of United Kingdom policy. Of relevance to this discussion is one area of the partnership involvement which explicitly concentrates on globalisation and the development of post oil economies in the Gulf States with specific reference to human capital and education. The consultation period was four days, and The Foundation team drew upon local expertise from KFAS, Kuwait University, and the Kuwait Institute for Scientific Research (KISR) following a presentation on a framework for the development of knowledge economies (Brinkley et al., 2012).

The KDP is the most recent economic development initiative published by the Kuwait Government (General Secretariat of Higher Council for Planning and Development, State of Kuwait, 2010) and followed on from The Foundation teams' consultation period relating to Kuwait's future economic development, and a previous seminar in 2009 (KFAS-LSE biannual seminar). The KDP lays the strategic foundation for a $104 billion development project, forming the first in a series of comprehensive development phases, with the expressed intention of transforming the Kuwait economy into a post oil financial and investment trade hub in the Gulf region by the year 2035.

The KPDG in cooperation with the LSE submitted a recommendation report to KFAS in 2012 (Brinkley et al., 2012) following an analysis of the findings of The Foundation team in 2010. According to this report there is a growing consensus that economic development along a knowledge economy trajectory offers a favorable direction for Kuwait to consider, building on the current KDP and

several earlier reports, in particular the Blair Report in 2009, which called for substantial educational reforms.

In the following discussion I present an overview of the KDP, suggesting the regional and global drivers that appear to be intrinsic in the KDP. Finally I consider some of the specific educational levers embedded in the policy document that are considered salient to the economic transformation envisaged by the Kuwait government.

2.2 Outline of the current medium term Kuwait Development Plan 2010 – 2014 (KDP).

The overall aim of the KDP is to facilitate the development of infrastructure and organisation that will provide a platform for the longer term developments to 2035 to build on.

In section one the introductory abstracts of the aforementioned speeches reveal significant perceptions by government, giving an insight into the reasons for the KDP. HH the Emir calls for very specific foundations that need to be laid and established:

> … democratic dialogue … constructive criticism … good faith … interest in the nation … seeking for the truth … objectivity … impartiality … freedom from personal interest … confidence in the constitutional system … (KDP 2010, p6).

These phrases used in HH the Emir's speech suggest a degree of dissatisfaction and unease with the current status quo regarding these basic notions of a democratic and trusted system of government and organisation, alluding to the possibility that these values need to be cultivated.

The Prime Minister makes reference to a need to be able to effectively respond to local, regional and global changes, and states an overall aim of developing into a post oil economy through the long term to 2035, realising Kuwait's transformation into a regional financial center. (KDP 2010, p8).

The Deputy Prime Minister reiterates the need for the KDP and economic and social development in the context of regional and global developments, using the phrase "… World crisis …" (KDP 2010, p11) and outlines how the KDP will

address the aforementioned economic fulcrums and the challenges faced by the country. Mechanisms cited include attention to re-balancing of the population constitution in terms of expatriate and national make up, interventions in the education system, and increased privatisation (KDP 2010, p11).

The strategic objectives in section one focus on living standards and a growth in the GDP through several strategies including: reducing public sector control and increased opportunity for the private sector; development and encouragement of industry and commerce in areas of finance, logistics, services industries, and commercial sectors, with a corresponding steady reduction on oil dependence; intervention in the education system to align it with the needs of employers; introduction of measures of efficiency, accountability, and transparency in government; measures of control to reduce dependency on the expatriate work force; and emphasis of the Arabic traditions and Islamic identity. (KDP 2010, pp13-16).

There is recognition in the economic assessment of section two that the dependence on oil as the main GDP generator is unsustainable, and that diversification of the economy is essential (KDP 2010, pp28-30). Depreciation in oil export revenues and foreign investments is perceived as being directly linked to world financial instability, and lack of confidence in Kuwait Stock Exchange listed companies relating to poor transparency and disclosure as well as weak performance.

Emphasis is placed on an evident lack of clearly laid down recruiting standards and relatively unregulated employer freedom. There are proposals to facilitate the protection of employee's interests, and to legislate in favour of Kuwaiti nationals to reduce the risk of significant Kuwaiti youth becoming unemployed. It is interesting to note an acknowledgement that in 2008 more than half of the Kuwaiti nationals seeking employment had no formal academic qualifications, and that generally the educational level of Kuwaiti nationals entering the employment market is significantly low. It is noted that there is a dearth of suitable Kuwaiti manpower to fulfill the requirements in the commercial and financial areas of the economy, and in the scientific and technical sectors. Education and training are seen as vital to the proposed economic development,

and there are proposals to improve the quality of education generally with the intention of increasing educational achievement and reducing what is perceived as a high educational failure rate. Specific establishments in the tertiary education sector are identified by the KDP as targets for interventions that are intended to readjust their functioning, bringing them into line with the transition economy objectives. It is also recognised that there is a need to increase the work satisfaction experienced by educators in the primary, secondary, and tertiary phases, and that educational research needs to be better resourced (KDP 2010, pp36-40).

The challenges acknowledged by the second part of the KDP are addressed by the policies presented in the third section of the document.

The private sector is given a central role in the economic policies, advocating increased participation of private companies encouraged by government incentives, with an emphasis on competition, and prioritizing the non-oil sector.. Some of these projects are anticipated to involve schools under private sector management as public shareholding companies (KDP 2010, pp49-64).

Population restructuring and education are addressed by the human and community development policies, advocating a 10% annual reduction in non-professional expatriate workers; limitation of early retirement; realignment of education to provide a service fulfilling the financial and commercial requirements of the economy; and the introduction of a system of selection grounded in the principles of increased productivity and efficiency for the professional expatriate population (KDP 2010, pp70-71).

2.3 Consideration of the policy drivers in the KDP.

If we look at the challenges identified by The Work Foundation-LSE team outlined in the Brinkley report (Brinkley et al., 2012) that Kuwait faces, there are persuasive reasons that suggest a need for economic change. The country certainly possesses the financial resources, at the moment that would be necessary to realise fundamental long term transition. The current reliance on oil as a mono-resource is a long term liability, and forms the basis of a very volatile economy due to fluctuating oil prices, an economy that is considered to be the

least diverse in the Arabian Gulf. This together with environmental degradation, substantial population growth, and a culture of unsustainable generous citizen welfares suggests change is imperative. There are substantial difficulties Kuwait will face, according to the report, including inadequate general administrative competence; an ingrained sense of national entitlement among the residents resulting from long standing reliance on substantial oil revenues which have allowed a welfare state culture to flourish; inadequate application of the law and its impartiality resulting from a culture of family connections and influence; and a perceived distrust of privatisation resulting from a sense of anxiety that the system may be significantly abused by families and individuals of influence. The report also makes reference to a reluctance to invest in the education system; a public education system that provides little incentive to teachers of relatively poor quality; and comparatively inadequate work ethic of Kuwaiti nationals in relation to expatriates (Brinkley et al., 2012). The following statement qualifies and quantifies the suggested issue regarding comparative work ethic:

> The World Bank's "State of Kuwait: Energising the Private Sector" survey found a strong duality in employer experiences with Kuwait and non-Kuwaiti workers. For instance, only 18.3 per cent of employers found non-Kuwaiti workers to exhibit indifference or an unfavourable work ethic, compared to 39.6 per cent for Kuwaitis. And whereas only 18.6 per cent of employers reported problems related to absenteeism and illness for non-Kuwaitis, the figure rose to 52.2 per cent for Kuwaitis. Not surprisingly, training provision is seen as an uphill battle that is largely not worth the costs. (Brinkley et al., 2012 p32).

Most of these challenges are acknowledged in the KDP by virtue of the policies that are intended to address them. If we firstly consider the global and regional drivers, and I will then consider the educational levers that I suggest are implicit in the KDP.

The political perspective outlined by Valimaa and Hoffman (2008) that countries need to be in a position to compete regionally and globally clearly reverberates in the KDP, where reference is made to the vulnerability of the Kuwait economy to changing global economic conditions. In the wake of the technological revolution in information access and retrieval, education becomes more conspicuous in terms of developing skills of finding and evaluating information,

and politically becomes important in facilitating global competitiveness. This notion is alluded to in the KDP education policies, which I will discuss shortly.

The change over time in patterns and traditions of production and consumption and the feedback mechanisms between the two, discussed by Stromquist (2002), are very apparent in Kuwait, with a clear tendency for global economics and technology influencing consumer sophistication and requirements, and the ensuing need for a more complex infrastructure referred to in the KDP.

The theoretical perspectives outlined by Spring (2008) help to illustrate how Kuwait and its education system are subject to global influence. My reading of the KDP leads me to suggest that the policies are influenced by a multifaceted amalgam of the Culturalist, World Culture, Post-Colonial Interpretivist, and World Systems perspectives, with Western ideology dominating certain areas of policy.

From a religious and moral outlook, we can see the political and cultural influence of regional clusters of nations particularly that of Saudi Arabia, representing the World Systems view. Parliamentary conflicts of opinion characteristic of the Arab Spring environment seem to be grounded in the dichotomy between traditional values and liberalism, and call for more democracy verses the right of the Al Sabah family to rule. There was a time when certain aspects of Kuwait's interpretation of Islam were more liberal than it is now. Alcoholic beverages, for example, were available in the 1970s in hotel bars, but the import and consumption of alcohol into Kuwait is now strictly forbidden. On the one hand we are beginning to witness a challenge to authoritarianism in terms of political governance, but there is also a confusion in the dynamic of moral and religious absolutism. More specifically, by way of illustration for example, the Hadas faction or Islamic Constitutional Movement, which has connections with the Muslim Brotherhood, is represented in the Kuwait parliament and has gained seats in recent years. There are other represented factions within parliament who have an agenda to revise the national constitution, which at the moment is quite egalitarian, including a group of Shia Islamic fundamentalists calling themselves the National Islamic Alliance, and a further group of Islamic fundamentalists known as the Ummah Party. These forces for religious and moral absolutism are counterbalanced by a

progressive neoliberal faction known as the National Democratic Alliance, and a faction of social democrats called the Democratic Foundation of Kuwait (Central Intelligence Agency, 2012). The religious and moral aspects of the education policies in the KDP can reasonably be argued to embody local and regional cultural influence, as we shall see.

An agenda of privatisation and reduced state control is key note thinking across all areas of the KDP, together with identification of education as a political instrument to facilitate economic competition and diversification. Knowledge becoming a salient focus of political and economic power, the Culturalist and Post Colonialist perspectives outlined by Spring (2008), is apparent in the KDP education policies. This perspective on education is clearly Knowledge Economy philosophy, and has been shown to be embedded in contemporary Western notions of economic development. The obvious role of the State in instigating these policies contradicts neoliberal Western ideology, but of course the purpose of the KDP is to lay the foundation that will underpin the later envisaged development plans to 2035, and so judiciously thought out State interventions are necessary at this stage. The longer term suggestion assumes an embedded neoliberal ideology of competition as the main economic driver in a free market environment regulated by predominantly private enterprise.

The knowledge economy discourse at the national, regional, and global level, outlined by Castells and Himanen (2001) is evident in the KDP. Nationally there is a political mix of authoritarian, welfare state, and free enterprise perspectives. There are policies intended to restrict the influence of free enterprise on education and police the profitable interests inherent in private education (Item 8 p74 & Item 16 p76 HE Policies). Nevertheless, it is clear that free enterprise political ideology dominates the KDP and intrudes upon education generally (Economic Policies p30; Items 13 & 15, p74 Public Education Policies). There are policies relating to moral and religious education, which might reasonably be interpreted as religious and moral absolutism and authoritarian in the sense that the education envisaged does not make provision for a broad consideration of world religions, but rather advocates the teachings of Islam as final and absolute (Item 3, p73 Public Education Policies). The regional and global discourse is reflected in the KDP in policies that address the issues of social cohesion

(pp70,86); increased work opportunity (pp51,53,71); international competition (p64); economic growth (pp51-55); and access to the international information culture (p92).

The predominant global educational discourse of neoliberalism, lifelong learning, and knowledge economy and technology outlined by Clark & Hermens (2001) and expanded upon by Spring (2008), and the notion of education being closely associated with successful economic competition and growth through the facilitation of an educated human resource seems to be a common thread permeating the educational policies of the KDP. There is an evident alliance with this ideology through policies intended to harness education as a key political lever in facilitating the strategic objectives of government. The apparent embrace of free market enterprise and privatisation encroaches on the education system firstly through the evolution of private educational establishments, and secondly through influence and interventions on the objectives and practice of teaching and learning commensurate with economic and political requirements. Specific examples of what I would suggest are decidedly neoliberal policies in the KDP include: targeting of the Public Authority for Applied Education and Training (PAAET) with the intention of realigning the curriculum and teaching methods to State objectives (Higher Education policies p76); Interventions to control the output of university graduates in line with State requirements (Higher Education policies, p74); Interventions to control research activities in both industry and education to fulfill perceived State needs (Higher Education policies, p77); Interventions to promote higher efficiency through technical training of employees decided upon by the employer (Higher Education Policies, p73); and as previously mentioned, policies concerned with privatisation of parts of the education system including Public Private Partnership projects involving a number of schools, and corporate investment in the research activities and running of some universities, together with State incentives to encourage more private higher education institutions.

The use of benchmarks and international indicators of pupil and adult competencies as a means of measuring the effectiveness of education in knowledge economies (Schleicher, 2008) to provide governments with data to inform educational policy and intervention is evident in the KDP. The PIRLS

2006 as a measure of international ranking in reading competency, and a similar ranking instrument for mathematics, the TIMMS 2007, have both been used in the past in Kuwait, and the results are referred to in the Brinkley et al., (2012) report. The KDP policies indicate that similar strategies will be used to evaluate the effectiveness of education in the future. As previously noted, such indicators have been developed through the OECD and its PIAAC Programme, and as previously discussed the OECD represents influential Western nations and holds a human capital ideological perspective on education.

In the remaining section of this chapter, the discussion focuses on some of the specific educational levers within the human and community development fulcrum of the KDP education policies.

Section 3 of this development fulcrum focuses on the Public Education Policies. The education policies are to be reformulated at all levels of the education system and are intended to impact on teachers and students through changes to school organisation, curriculum, and teaching methodologies commensurate with "… scientific, cultural, spiritual and physical growth for the student." (KDP 2010, Item 1, p73). Through these changes, the policies seek to inculcate in the students what are referred to as "positive concepts" such as pride in and loyalty to the country, moral values, and social identity with a sense of citizenship and national unity; and to develop skills of creative and free thinking (KDP, 2010 Item 2, p73). Integration of all stages of the education system, emphasising religious education (underlined) and harmonious functioning (KDP, 2010 Item 3, p73). Establishment of a national center that will be independent of the Ministry of Education, and will monitor, measure, and evaluate the quality of all aspects of the education system with neutrality and transparency (KDP, 2010 Item 4, p73). Implementation of a Higher Council of Education that will oversee the development of public education, and will also be independent of the Ministry of Education (KDP, 2010 Item 5, p73). Increase the number of secondary school students studying sciences to over 50%, and to deepen interest in Mathematics, Languages, and Natural Sciences (KDP, 2010 Item 6, p73). Improve performance of the education process and reduce failure rates through mechanisms of testing and evaluation of "…modern teaching and measurement methods…" (KDP, 2010 Item 7, p73). Increase the number of study hours at all

stages of school education by an average annual percentage of 34% (KDP, 2010 Item 8 p73). Subjective selection of teaching staff and promotion based on their "…professional and scientific development…" with the introduction of a professional licensing system (KDP, 2010 Item 9, p74). Implementation of a system of quality control for educational establishments, to include "modern systems" of school management (KDP, 2010 Item 10, p74). Involvement of the private sector in the reconstruction of old government school buildings and provide land for private sector development in education (KDP, 2010 Items 13 & 15, p74). Private schools are to be subject to constant evaluation of quality in teaching, curriculum, and facilities, and the private sector has been specifically targeted for the regulation of "trading education" (KDP, 2010 Item 14, p74). This phrase refers to the culture of private tuition, which is very prevalent in Kuwait, and through which relatively poorly paid teachers in comparison to other professions of similar academic qualifications entry, are able to substantially increase their income.

Section 4 sets out the Higher Education policies. University output is to be aligned with the State strategic objectives of facilitating Kuwait's transformation into a financial and commercial center, with attention to quality improvement and "…qualitative aspects of the educational process…" (KDP, 2010 Item 1, p74).

Section 5 addresses scientific research. Research is to be encouraged with the intention of such activity serving as a tool of support for economic as well as social development, partly through increased financial support (KDP, 2010 Item 1, p76 & Item 3, p77). Other policies that are related to education within the Human & Community Development section include addressing the civil & social rights of women, but without contradicting Islamic law (KDP, 2010 - Policies of women & youth's affairs - part 9, Item 4 p85); Improvement of children's "culture" through development of "…fine and objective art works…" (KDP, 2010 - Policies of social work & social development - Item 9, p83). Encouragement of creativity, "…free thinking…", "…superior culture…", "…rejection of extremism…", through the development of an artistic and literary infrastructure of libraries, theaters, museums etc., and a medium of "…intermediate thinking…" (KDP, 2010 - Policies of thinking, art and cultural affairs - Items 1,3,5,6,7, p86).

2.4 Summary.

Consideration of these education policy drivers and levers reveals a number of themes including: Political interventions to reformulate education policies at all levels; changes to education institution organisation; changes to curricula, teaching methods & methodologies; an emphasis on monitoring and evaluation to improve standards; re-alignment of curricula to State strategic objectives; establishment of organisations with a remit to oversee education development and quality; increasing the number of science, mathematics, and technology students & graduates; private sector involvement in the building, running, and management of education institutions; an increase in applied education and training; output of graduates, and research output re-alignment to Sate strategic objectives encouraged through State financial incentives and State imposed priorities; and the subjective selection of teaching staff for appointment and promotion.

These themes within the education policies of the KDP resonate with the wider policies, and lead me to suggest that the KDP document as a whole strongly resonates with the ideology of neoliberalism and knowledge economy development discussed in the previous chapter, where education is considered salient to economic development and competitive ability, and as such becomes subject to political interventions that in a sense serve to reconfigure the climate and philosophy of education as a service to economic activity.

The notion of knowledge economy and its functioning is essentially a Western notion, one that has evolved in the dominant and powerful Western nations, and therefor in an essentially different cultural context to the Middle East. There is a further important theme that emerges from the KDP that we do not see so clearly and distinctly in the ideology of neoliberal politics and economic development. This theme is a religious one, and forms a vital and essential component of the Middle East context generally. The Islamic tradition and its laws are interweaved into the very fabric of Kuwaiti society and plays an important and vital role in all aspects of life and the conduct and outlook of the individual (See Appendix 1). This dynamic of the adoption or imposition of neoliberal political interventions from a predominantly Western cultural context into a very different cultural and

religious context such as the Middle East forms the essence of a suggested possible tension in the economic transition of Kuwait, which I will explore in the following chapter.

It is prudent to reflect upon my own ontological position at this point, because this will have inevitably influenced the foregoing discussion. I have a vested interest in Kuwait because I have lived here for twenty years. My children were born and brought up here, and my wife is Kuwaiti, and so our family home has been established in the country. Unlike the vast majority of European expatriates, I have been able to integrate into the culture and religion (I became a Muslim) and gain a more in depth insight into its nature, and as such, the direction in which Kuwait chooses to direct its future is more meaningful to me on a personal level. I think it is important to make this clear, because the focus of my research has its basis on a perceived emergent suggestion of tension in the economic transition process, partly based on my own immersion in the cultural context for such a long period of time; partly based on this analysis of the KDP and its relationship to the wider political and economic context; and partly based on peer reviewed literature in the field, which I will now explore in the following chapter. It should also be noted that this is frontier material, involving a developing country with immense financial resources to bolster and see through the economic transformation to a knowledge economy that is just setting out on its proposed trajectory.

CHAPTER THREE.

RESEARCH EVIDENCE SUGGESTING A CULTURAL TENSION IN THE MIDDLE EASTERN COLLECTIVE CULTURAL CONTEXT ASSOCIATED WITH EDUCATIONAL GLOBALISATION.

The discussion so far presents an argument that infers significant influence acting on Kuwait's proposed economic development from the global discourse relating to knowledge based economies. What is interesting is a suggestion that there are certain cultural sensitivities whereby the proposed economic development poses a perceived threat to certain aspects of life in Kuwait. This sense of unease emerges within the KDP itself, with for example, references to a need to maintain and reinforce an adherence to the Islamic identity and Arabian traditions embedded in the culture. There is recognition in the KDP that the social texture and identity of Kuwaiti society is exposed to potential compromise from influences inherent in the majority expatriate population. The long standing vital attitudes and values, and the traditional conduct and mindset characteristic of the Kuwait context will bear influence on the economic transformation process, and can be considered as important issues. Implicit in these challenges will be the vital role of education, through which government expects to produce a generation of creative individuals (KDP, 2010, p86) by reforming the education system. It is this political driver and its impact on education reform and how this interfaces with the culture that is of significance to this study in terms of the suggested tension that is inherent in the process.

Kuwait has undergone a comparatively rapid change in its way of life since the discovery and exploitation of oil, and is now experiencing yet again a need to change in order to adapt to the requirements of a competitive knowledge economy in the global market place. It might be argued that, from a Western cultural perspective, there is a prerequisite for a cultural adaptation or shift if Kuwait is to be successful in its aspiration to fit in with the global knowledge economy. Cultural evolution and changes in embedded traditions is a relatively slow progression, and where this process is subject to pressure from rapid economic adjustment, there is likely to be a cultural tension inherent in the

process. This chapter explores further evidence in the peer reviewed literature for a suggested possible cultural tension in the Middle Eastern collective cultural context, resulting from the political and global economic sway that has been addressed in the previous chapters.

3.1 Research in the field.

Wright and Bennett (2008) note that value systems embedded within a culture and society are significant variables in terms of their impact on learning style preferences. The general lack of peer reviewed research in the arena of value systems in the Middle East region and explicitly the Gulf Corporation Council (GCC) countries is underlined in their cross cultural study on participation of team members and team harmony within a comparison sample of Middle Eastern and Anglo groups. The study contributed to our understanding of the functioning of GCC companies, but of interest to this discussion the findings suggest that there are fundamental important differences between Anglo and Arab cultures that impact on learning preferences. Specifically the notions of collectivist values associated with Arabic societies, in contrast to the predominant individualistic values more characteristic of Western societies, which is discussed in more detail below. From this perspective it is suggested that Arabic collectivist cultures (Al Harti, 2010; Hofstede, 2001) value inherently group commitment and a sense of group belonging more so than Western individualistic cultures which places more emphasis on self-interest. This disparity of preference is argued to impact on motivation to engage with learning, and preference for teaching and learning styles.

Al Harthi (2010) reported significant differences between Arab and American learners in their preferences for structure and interaction in distance learning programs and how these preferences impact on the individuals' self-efficacy (perception of ability to control learning) and how they seek assistance. The collectivist and individualistic paradigms are derived from the work of Hofstede (2001) in which it is suggested that in collectivist societies avoidance of confrontational situations, saving face, and maintaining harmony within the group is paramount. In contrast individualistic societies prefer to address conflict of opinion through open and direct discussion, and as such the encouragement of

speaking up in group situations is valued more so than in collectivist cultures. As a consequence of this, Hofstede (2001) suggests collectivist cultures have a preference for a more teacher centered learning environment characterised by a more formal approach, a teaching methodology facilitated by the culture itself and its social order which empowers the teacher to take authority and initiate the teaching and learning process. Al Harthi (2010) found that students of Arabic ethnicity showed a preference for significantly greater “rigidity” in the structure of teaching and learning and a preference for greater interaction with their teacher in comparison to the Anglo Western group.

Bridger (2007) reports on a study which explored the lived experience of a cohort of Middle Eastern staff nurses who were exposed to a Western curriculum that sought to develop active learning skills in the contemporary sense, i.e. the cohort of experienced nurses were expected to engage with and develop skills such as: critical thinking; creative thinking; critical analysis and interpretation; flexible problem solving; influencing ideas and decisions through argument, explanation, challenging; communication to a peer audience; collaboration, etc.. The aim of the curriculum was to empower the staff nurses to exploit specialist practitioner knowledge more effectively, and the study focused on participant lived experience of practitioners acquiring and putting these skills into professional practice. What became apparent, according to Bridger (2007), was that the contemporary Western style teaching and learning strategies severely challenged the participants past learning experiences, in that they were found to demonstrate the characteristics of passive learners as understood within the behaviourist learning tradition, i.e. learning by rote through an expectation of teacher lead learning, with a tendency to close down on tasks prematurely when challenged, and difficulty integrating concepts and prior knowledge to resolve problems. The expectations placed upon the cohort by the teaching and learning methodology of the curriculum were found to be beyond their capabilities by virtue of their previous experience, understanding, and expectations of the learning process. There appeared to be a lack of congruence between the Western curriculum model and the nature of the students.

Focus group interviews and field observations were employed in the study, and among the emerging themes from the analysis was a strong socio-cultural

influence on learning. In the report, extracts of transcripts from interviews with participants are presented to illustrate these influences. In summary they include: male preoccupation with status issues; strong family influence on the valuing of education; conflict between the needs of the family and acquisition of education; societal expectations of high grades and maintaining dignity, honour, and reputation; issues related to peer pressure and community response from the local Arab community and being able to fit in after pursuing a Western education; the effect of a Western education on beliefs and way of life; male and female roles in Arabic society related to acquisition of education; sense of inadequacy when exposed to the challenges of contemporary Western notions of teaching and learning. What is interesting in this study (Bridger, 2007) and other studies that I make reference to in this section, is the possible suggestion that advocates of curricula and notions of teaching & learning from the West view their prescriptions as universalistic, appropriate and applicable across the globe, when perhaps they are not. They don't necessarily apply well in their own locales, let alone elsewhere. In the following chapter I discuss HSW in this sense, highlighting how there is research to suggest that the implementation of HSW in the UK was fraught with difficulties and not particularly successful.

Bridger (2007) usefully illustrates an example of how a typically Western style curriculum with its contemporary teaching and learning methodology was fashioned within an essentially socio-cultural vacuum in the sense that it was conceived by people (Anglo-American) with limited understanding of the target socio-cultural context into which it was implemented in this particular case. There appeared to be a lack of appreciation of the incompatibility between two different educational philosophies, differences of expectation rooted in fundamental cultural differences, and the latent complications and tensions inherent in exporting an active learner methodology into a cultural context with expectations and a long history of passive learning. In a sense one could argue that there are ethical implications where Western educational practitioners make assumptions that their pedagogy is the most appropriate means of facilitating progress by virtue of its contemporary dominance, and seek to impose it wherever they go, in the belief of its universal application and in ignorance of the difficulties and conflicts this may cause and the socio-cultural sensitivities and preferences of

the target population, particularly if they fail to acknowledge that their ideas may not necessarily apply particularly well in their own locales, let alone elsewhere. This issue can be considered to be a significant challenge for expatriate educators, especially when cultural expectations may not be made explicit in the host country, and particularly when failure to engage with the cultural issue is brushed aside using the excuse that the school is an English curriculum school and therefore does what is done in the UK in order to fulfill the requirement (let's say for British Schools Overseas accreditation) of its British character.

A further example of a Western conceived curriculum and teaching and learning methodology, where research has suggested such an intervention is not entirely compatible with the Middle Eastern social and cultural context is discussed by Wilkins (2002). In this paper the implementation of the British conceived National and Vocational Qualifications (NVQ) system in Oman is considered. The NVQ has been adopted by the Omani government as part of its program of "Omanisation" where Omani nationals are being trained to replace expatriates in the workforce. Whilst the program has had some success, Wilkins (2002) identifies important social and cultural issues which contribute to the difficulties of implementing the NVQ. It is noted that most of the students fall into the eighteen to twenty one age bracket, and that there have been significant problems relating to poor attitude and commitment to the program with inadequate attendance or interest. There were also reports of unreliability and lack of motivation. Significantly, Wilkins (2002) notes that the centers offering NVQ programs are often coerced by government to do so through financial incentives, rather than by choice. Of interest to this study are aspects of the social and cultural Omani context which render certain parts of the NVQ program inappropriate as an educational intervention. An example cited in the paper is the apparent lowliness ascribed by NVQ candidates to many of the level two tasks, such as keeping the work environment clean and tidy, whereby candidates experienced a tension associated with being required to undertake duties that for them are considered beneath their dignity, and consequently were found to actively hide such engagements from their families. This particular example resonates with my own experience of how difficult it is to get students in the school in which my study took place to pick up their litter in the yard and

keep it tidy. For most Westerners, I would suggest that keeping your environment clean and tidy is a normal part of everyday life, but to try and comprehend a culture where this is not the case in terms of doing it yourself is quite difficult to do. This stems from a lack of understanding on the Westerners' part of the social and cultural sensitivity regarding the hierarchical social structure of the Middle Eastern context. For those Westerners who might react to intransigence on the part of the students regarding picking up litter by a typically colonial attitude of: "Well lets teach them what is best for them and make them do it!" is clearly inappropriate and is likely to lead to tension and confrontation. Wilkins (2002) lends further support to the notion discussed earlier of a culture shared by the Arabian Gulf countries which holds a preference for white collar occupations in administrative and management positions, valuing authority and personal relationships, and where decisions are often based on intuition and religious conviction. The appointment to managerial positions is characterised by a strong element of family relationships and tribal loyalties, and the acquisition of experience, qualifications and ability to do the job is not necessarily paramount. The fact that NVQ programs fail to take into account the different social and cultural context in Oman, compared with the British context in which the program was developed, make some parts of it lack relevance and contributes to a sense of tension.

Williams, et al. (2011) reviews the literature relating to localisation of human resources in the Middle East generally and in particular in Qatar, suggesting there are a range of common obstacles acting against localisation throughout the Gulf region. Amongst these are education systems that fail to align to economic requirements; a social and cultural preoccupation with prestige as opposed to performance in the work place; and practices that restrict the progress of women in the work environment. The paper draws upon the work of several authors (Radwan, et al, 1995; Achoui, 2009; Forstenlechner & Rutledge, 2010; Harry, 2007) relating to research on work, employment and status matters in the Gulf region, all of which resonate with the notion raised earlier of a cultural preference for white collar occupations and an aversion to manual occupations common to the Gulf region. The paper also lends support to other issues previously discussed of an at-risk culture due to the majority expatriate influence; education

systems that are inefficient in terms of expenditure verses outcome; and lack of transparency.

Essentially the international school context is a complex interrelated dynamic of structural (policies, regulations, goals, hierarchy), political (power, conflict, competition, organisational politics), symbolic (culture, meaning, ritual) and human resource factors. (Keller, 2015). Bolman and Deal (2008) view this dynamic as the challenge for international school leaders who firstly need to acknowledge and understand it, and then sensitively find ways to bridge the gaps between ideology and practice, rather than aggressively impose a specific and value laden notion of alleged “best practice”. Bolman and Deal (2008) discuss the complexity of organisations and approach this intricacy through four frames of reference including organisational structure, human resource, political, and symbolic, giving a specific example of their application using a school. Of significance to my study is the recognition of a political dynamic in the make-up of a school, which Bolman and Deal view metaphorically as a “jungle”, where strategies and actions emerge through different stakeholder groups in the organisation negotiating for their ideological preferences. In this sense the school administrator is viewed essentially as a politician acting through the processes of setting agendas, being aware of the political terrain, coalition formation, and negotiation to facilitate the accomplishment of agendas. (Bolman and Deal, 2008).

Halicioglu (2015) discusses the challenges faced by teachers who are new to the international school setting. Getty (2011) makes an important observation that there is often an assumption that teaching is essentially the same regardless of location and culture. New teachers, and particularly relatively new entrants into the profession, who find themselves in a foreign school may find it difficult to adapt to the differences in practice and expectation that they have become accustomed to. The misconception that teaching should be, or is the same as what practioners have been used to in their home culture, is likely to create difficulties. Getty (2011) draws attention to cultural differences in the classroom making reference to personal experiences in the Chinese cultural setting compared to that of America. Cultural differences between Chinese and American classrooms can have profound effects on teaching and learning, and

teachers need to be able to appreciate and understand basic differences in the moral, political and educational dynamics of the classroom compared to their home culture in order to make teaching and learning more effective. It is suggested that educational globalisation often carries a significant lack of understanding of global differences in sensitivities and preferences that can affect the teaching and learning process. Of significance to my study here is the understanding that cultural norms that are outside of our experience can be disquieting when we are exposed to them and negative value judgments about the culture can easily be made in response to feelings of insecurity resulting from such exposure as a strategy for coping with the experience. Getty (2011) relates that these kind of issues have been the most significant ones she has had to deal with in her teaching career (p348), citing issues of miscommunication, “saving face” and politics encountered with Chinese students. Importantly Getty (2011) acknowledges that in the teaching situation it may take years of experience for the teacher to fully grasp the subtle nature and impact of these cultural differences, in order to better understand student engagement with the teaching and learning process. A further noteworthy observation given relates to what counted as learning to the Chinese students. They were preoccupied with getting information that was relevant to the subject; having a critical opinion developed from and grounded in the context of multiple ideas about a subject area was not considered important (p350). The students were not accustomed to holding or giving personal opinions because this might offend others, including offending the teacher. Such notions I would suggest resonate with discussions about Arab collectivist culture elsewhere in this thesis. An important understanding here is that teachers from foreign cultures need to appreciate that they need to be willing to adapt professionally to the host culture in which they find themselves.

Halicioglu (2015) notes that there will be a degree of cultural adjustment required, and that the ability and willingness of practitioners to make adjustments to the philosophy and curriculum of the school will largely dictate the lived experience of this challenge. Tange (2005) presents a critical perspective on cultural assimilation of foreign workers, arguing that cultural adaptation requires longer than one or two years. It is suggested that up to two years will be required

to enable new expatriates to adjust to the point where they are able to begin to manage in their new culture, but that this adjustment will be essentially limited to a superficial understanding of the host culture. In order to acquire sufficient depth of perspective and empathy to facilitate the mutual understanding for a more comprehensive and effective working relationship within the host culture it is suggested a longer period of immersion in the culture is needed and that cultural adaptation is necessarily a lengthy process. Of relevance to this thesis is the suggestion that because there is a high turnover of teaching staff in the international school context with staff remaining in a school or country for a relatively short period of time in general, many expatriates will never move beyond the initial superficial adjustment phase to the host culture, and as such their ability to work effectively within the host culture becomes inherently limited. Equally it is argued that those expatriates who have remained within the host culture for many years and have in a sense partially “gone native” in that they have adopted and incorporated important aspects of the culture into their own way of being in the world, may no longer properly represent the culture of their origin. This scenario might be regarded as an undesirable characteristic for some institutions that seek to portray and inculcate important aspects of the culture of origin, for example “British Schools” overseas. (Tange, 2005). Halicioglu (2015) notes that practitioners from different cultural backgrounds may hold quite different points of view about values and what constitutes an appropriate education. These observations in the literature are particularly pertinent to the Middle East cultural context and of relevance to this study. Halicioglu (2015) discusses how certain expectations in the Middle East may contradict the value systems of western practitioners and make it very difficult to accept for example censorship and amendment of Western text books and curricula to comply with Islamic societal values and belief systems.

From my own perspective, when I came to Kuwait twenty years ago, it was quite evident that these notions of difference in culture and expectations were well recognised, and there was a very acute awareness instilled in new Western arrivals that an expectation of adjustment was expected and required. However, in recent years I have noted a decline in this expectation in the school which is the subject of this study, with arguably naive calls for changing the culture of

education in Kuwait, and the imposition of contemporary Western teaching and learning pedagogies, usually by relatively young and inexperienced new comers who have little or no experience or knowledge of the customs, expectations and evolution of the society in which they frequently forget they are transient guests. Often the motivation for these migrants for being in Kuwait I would suggest based on my observations and experience of twenty years in the field seems to relate to the tax free salaries and benefits afforded by an overseas contract. Hayden & Thompson (1998) also note that the relatively high turnover of staff in the international school context is a significant factor for these schools (Hayden & Thompson, 1998 p552), which on the one hand creates better career advancement opportunities for those working in international schools, but also weakens the organisational stability associated with longer term tenures.

Halicioglu (2015) draws attention to the importance of accepting that children are influenced by their cultural background and upbringing and will think and behave accordingly. It is therefore imperative that practitioners in the international setting take account of this and adjust their pedagogical approach and curricula. Most importantly it is argued that the contemporary Western tendency to place too much emphasis on an imported single national approach that has been conceived and developed in an entirely different set of social and cultural circumstances should be avoided. This requires the culturally sensitive development of appropriate and relevant curricula, a process that generally needs to be acquired by newly recruited Westerners in the international context (Halicioglu, 2015). Joslin (2002) discusses the culturally diverse working environment of international schools and the importance of teachers acknowledging that an understanding of this is vital in developing effective relationships in the process of education. It is noted that international schools have an inordinate potential for disharmony as a consequence of their cultural diversity, and that this very diversity can actually work against a comprehensive understanding of cultural sensitivities. In a sense it could be regarded as an unrealistic expectation that teachers in international schools will have the awareness of cultural values and behaviours desirable for fully effective teaching to take place. As such it might be argued that teachers in the international cultural setting will invariably be working to some extent with

students and colleagues in the absence of a comprehensive understanding of their cultural norms and sensitivities. Joslin (2002) argues that this scenario makes it imperative that effective teaching in the international context requires the practitioner to “accept that their own seemingly ‘right’ way of seeing the world needs to be ‘unpacked’ and questioned.” (Joslin, 2002 p49). Such a process of cultural adaptation it is suggested, carries an inherent level of tension, and that this is impacted upon through the level of willingness on the part of the teacher to change their perceptions and attitudes and take part in the process of confronting different ways of thinking and behaving. The level of retention of a culture of origin mind-set is therefor likely to impact on how successfully an individual is able to adapt to foreign cultures. A strong and inflexible belief in a particular idea about how things should be done or operate can lead to difficulties when we are required to work in other cultures. Teachers in the international cultural setting need to be capable of reframing their arenas of reference in terms of educational values and pedagogy. Joslin (2002) suggests that the application of a standard set of competencies, conceived in a specific national culture of origin, in educational provision is inappropriate in the international setting, and that teaching staff should ideally represent a variety of international pedagogical approaches and educational values. (Joslin, 2002).

Leask (2006) makes a very important point that there are different ways of learning that are associated with cultural issues rather than just cognitive processes, and that in the drive to extend the variety of learning strategies available to children it is important that they are not denied access to those strategies that have been successfully used previously and are accepted as part of the cultural norm. Leask (2006) discusses Western notions about the differences in learning preferences and styles of Asian students compared to contemporary Western ideas about what constitutes effective learning. One issue addressed is the difficulty encountered with Asian students in facilitating critical thinking skills and how this might relate to culture of origin and value systems (pp. 185 – 188). Of significance is the suggestion that as Western educators, just as we take account of different ways of learning in the predominantly Western student cultural background classroom, we should also take account of cultural preferences and learning aptitudes in the classroom

where the predominant cultural background is not Western. Leask (2006) argues that as teachers we need to acknowledge differences between Western cultural expectations and those of our students from different cultures, reflecting on how we think and behave. Importantly the suggestion is made that teachers of international students should question the assumption that their primary focus needs to concentrate on "how we can make them think and be more like us." (Leask, 2006 p189). Halicioglu (2015) makes this interesting and important point regarding teaching in the international school context:

> Teachers have to adapt accordingly and appreciate that the definition of good teaching can vary considerably, depending on the context. Halicioglu (2015) p250).

Ali (1996) presents a fascinating insight into the state of contemporary value systems in the Middle Eastern countries, and gives a historical perspective on their development. The paper essentially considers matters that are associated with the implementation of Western organisational development strategies in the Arab context and argues that such interventions often fail to take account of the Islamic-Arab tradition and consequently are less relevant and effective than they could be. As part of the discussion, Ali (1996) reflects on issues such as the Islamic work ethic, culture, and prevalent Arab conventions associated with organisational change, contending that value-based processes are essentially embedded in organisational development processes. Reference is made to Hofstede's work and the contention that implementation of Western models of organisational management interventions have generally not been as successful as they might have been in developing countries, primarily because local management practice fails to be recognised as an integral part of the cultural substructure, and so attempting to import wholesale and implement a different set of Western work ethics becomes difficult. An example here is the common practice of favouritism and paternalism in Arab management practice, which stands opposed to contemporary more objective Western approaches. Ali (1996) refers to the Western notions of work attitude as the "Protestant work ethic", which inculcates values of drive and commitment to surpass expectations within the organisation. This value system is paralleled to the early Islamic work ethic during the historical period of the first six centuries of Islam, alluding to Quranic verses and the sayings and practices of the Prophet Mohammed (PBH) that

make reference to fulfillment in life through hard work, and the upholding of business intentions as a noble pursuit. Both paradigms of thought attribute a spiritual dimension to the pursuit of honest hard work as well, alluding to the concept of spiritual absolvement and fulfillment. What is interesting is that Ali (1996) contends that the original Islamic work ethic declined with the rise of the Ottoman Empire during the early fifteenth century as a result of Turkish military absolutism and the requirement for imposing dominance over the Islamic nations, which took the form of "… a conservative theology of mere obedience to authority …" (Ali, 1996 p3). The historical distillation of the Islamic work ethic however leaves intact a fundamental religious dimension, which places emphasis on intention rather than outcome, and an ever present influence on daily life of a belief in a spiritual life after physical death, the outcome of which depends upon intention and conduct in the present. I would suggest that this dimension is far more prevalent in Arab society than it is in the contemporary Western Protestant work ethic, which increasingly seems to be characterised by a monetary code of value at the expense of the religious dimension. This religious dimension, or Islam, has a major influence in contemporary Arab society on individual and group conduct. Ali (1996) argues that this is the case because by virtue of the upholding of Islamic principles in the Arab world, Arab society remains more traditional in the sense that values of honesty, personal honour, respect for elders, kindness, cordiality, and loyalty are deeply interwoven into the fabric of the culture and held in high regard by the majority of people. It might be argued that such values do not sit comfortably with the earlier comments made regarding favouritism. In this regard I refer the reader to Darmaki (2011) below. Whilst these characteristics seem to be at odds with behaviours such as favouritism, it is the family that remains central in Arabic society. Given the recent tribal ancestry and the fact that cultural norms change very slowly, we still see favouritism based on family and tribal connection. As a Westerner who has been immersed in the Arab culture for twenty years, I can support this contention. Islam is an all-inclusive regulatory influence on society, adopting the Quran to govern social and political edicts. Al Sadr, (in Ali, 1996) suggests that the Western or Protestant work ethic by contrast has been largely influenced by a motivation for the accumulation of wealth and subsequent power (knowledge economy and competitive advantage), whereas in Islam there is an

emphasis on achieving a balance between worldly and spiritual pursuit, and so change and development in the Arab world aims to maintain an equilibrium between these two dimensions preventing society and the individual from swaying toward austerity or materialism. As a consequence it is suggested that Western interventions can sometimes be viewed with suspicion, perhaps more so now than in the early part of the twentieth century, as increasingly more Arab people are seeking to return to the old Islamic work ethic and re-establish their cultural identity following centuries of Ottoman and Colonial influence.

Al Darmaki (2011) examined the help-seeking inclinations of tertiary education students in the UAE. This study lends some support to the notion of Arabic Western cultural dissonance and the emergence of cultural tension associated with Western interventions. The paper draws attention to some of the negative effects apparent in Emirati society attributed to Western influence and the accompanying contemporary rapid economic, cultural, technological, and social change. The negative aspects of these changes are reported to include rising unemployment, divorce rates, and drug abuse together with issues of identity confusion and role conflicts, creating stress and feelings of unwell being among individuals who are trying to cope with the pace of rapid change. Of interest to my study is the identification of Arabic social and cultural barriers that prevent students seeking professional help related to educational as well as health issues, further illustrating the lack of congruence between Arabic cultural expectations and Western notions of helpful interventions. Al Darmaki (2011) contends that in Arabic society an individual's wellbeing is largely contextualised within the Islamic faith and their relationship with Allah (God). Consequently adversity and privilege is seen as being associated with having been imparted by Allah as a consequence of one's intention and actions. Where psychological or mental health issues are involved, there is a reluctance to seek the professional interventions of a counselor, for example a school counselor regarding behaviour issues, because such matters are viewed to be associated with a personal weakness in a person's religious faith and therefore the adversity is deserved and intended to help the individual to reform themselves. Such admission of weakness is seen as shameful, which in Arabic society is to be avoided at all costs. For Westerners who have little or no experience of Arabic culture, this

notion or perspective, I would suggest, is quite difficult to accept and would be likely misunderstood. According to Soliman (1991); Eapen and Ghuash (2004) cited in Darmaki (2011) it is the family in Arab culture who remain the main source of help and advice in all matters, and where professional help is to be considered, such decisions will be determined by the family. There is an expectation that personal problems will be the subject of family discussion, and should not be disclosed outside of the family circle. To do so is seen as a weakness and an infidelity. In Arabic culture the religious equivalent of the Western notion of a professional councillor is the Mutawaa, who possesses scholarly recognition as being knowledgeable in the Islamic faith. Consultations with a Mutawaa usually involve the prescription of readings from the Quran in an attempt to bring the afflicted individual closer to Allah (Al Damaki, 2011). This is not to say that there are no professional councillors in Arabic society, of course there are, and such councillors have a Western style professional training. The essence of the discussion of this paper is that there are significant social and cultural barriers that serve to discourage seeking their advice. Indeed Al Damaki (2011) suggests that such professional counsel is often seen as being no more than just advice, but lacks ability to facilitate meaningful change (Al Damaki, 2011).

Dimmock and Walker (2000) describe culture as the "… values, customs, traditions and ways of living which distinguish one group of people from another" (Dimmock and Walker, 2000, p304). Given this notion of culture it becomes evident that when Western practitioners attempt to bring with them their own cultural ideas and norms into the international school context, there is a need to have full consideration for the host culture, and it becomes imperative that the school leaders appreciate the need to be fully aware of the different cultural sensitivities that may exist. It is pertinent to note here that there is evidence to suggest that international schools tend to be dominated by an Anglo-American ethnocentricity in terms of administration and management style (Keller, 2015). There is a need for the school management to demonstrate an ability to sensitively bridge the cultural dualities that define the working dynamic of the international school, rather than impose their own preconceived ideas wholesale.

Wilkinson (2014) reminds us that the content and teaching of the curriculum has a significant influence on student engagement and attitude and notes that the scholarly research has focused on what is actually included in the curriculum, pointing out that what is not included or excluded from the curriculum may be equally significant in terms of learning outcomes. Vallance (1973) presents a fascinating discussion which attempts to understand the notion of a hidden curriculum in schools from a historical viewpoint by analysing the rhetoric of justification for the advent of mass education in America. The argument suggests that the main rationalisation for schooling up until the end of the nineteenth century was a need for social control. Vallance (1973) uses the term social control in the sense of "the inculcation of values, political socialization, training in obedience and docility (and) the perpetuation of traditional class structure." (Vallance, 1973 p5). What is interesting is the suggestion that this justification was made quite explicit and openly acknowledged by those arguing the case for American public education at that time, but that this function of education disappeared from the language of justification during the twentieth century. Vallance (1973) argues that this previously explicit justification for schooling has been "hidden" in contemporary rhetoric on education (p5) and that the suggested social control purpose of public education is no longer openly acknowledged but continues as a part of the hidden curriculum. (Vallance, 1973).

Apple (1993) argues that curriculum content and exclusion is selective in the sense that it represents a body of knowledge or absence of knowledge that has been given legitimacy by those who construct the curriculum. Value judgments have been made as to what constitutes the curriculum, but equally also what constitutes the absent curriculum. Apple (1993) contends that the politics of culture and the process of redefining what constitutes education are interrelated. The determination of what becomes legitimate knowledge and pedagogy is suggested to be the product of the dynamics of economic tension, conflict and compromise, and is inherently linked to those groups who hold power in a society. An interesting example is given relating to school social studies texts referring to the historical period of "the Dark Ages", posing the suggestion that this period in history might equally be considered as "the age of African and Asian Ascendancy" (p1) or as mentioned later on in this thesis, the Golden Age

of Islam. Apple (1993) proposes that education is implicated in contemporary political conflict, with disparate power group interests intruding into the school curriculum, teaching and learning, and evaluation. It is argued that the subtleties of dominant and subordinate power groups within society are both sustained and changed through the politics of education, encompassing decisions as to what counts as legitimate education, how it is organised, who is allowed to teach the curriculum, and the criteria by which appropriate teaching and learning having taken place is judged. Wilkinson (2014) discusses the absent curriculum in terms of a hidden curriculum constituted by three distinct levels of national policy, school management, and teachers. At each level decisions are made as to what knowledge is omitted in the curriculum. So at the national level the hidden curriculum constitutes knowledge that could have been included by policy makers but has been excluded. At school management level choices are made from the knowledge that has been made available at the national level, including some topics but not others. Teachers then make further choices from the departmental schemes of work with some topics receiving more emphasis than others.

Wilkinson (2014) studied the effects of the hidden or absent curriculum on a cohort of Muslim students in a state secondary school in the UK, specifically looking at the absence of historical contributions to knowledge by the Muslim world in the English National Curriculum for history. The study concluded that lack of acknowledgement of Muslim contributions to knowledge in the curriculum had a demotivating effect on the students and hindered their engagement with the history curriculum generally. In a sense the hidden curriculum can be perceived by students as a statement of their insignificance when their cultural and religious heritage and historical contributions to knowledge are excluded, which can have significant effects on their emerging identities and learning.

Al Hazza and Lucking (2015) debate this issue further with special reference to historical Arab contributions to scientific knowledge, arguing that appropriate changes to the curriculum that are sensitive to the cultural heritage of participants generally can help to avoid bias and marginalisation, and that this should be an important aim in contemporary curricula. It is argued that Western curricula generally exclude important Arab contributions to our scientific

knowledge heritage that occurred during what is known as the European Dark Ages between the eighth and fourteenth centuries, a period when the rise of Arab cultures took place during the Golden Age of Islam. At this time the Arab world witnessed the rise of organised infrastructure with a wealth of splendid metropolises, during which a prolonged period of relative peace and prosperity facilitated significant cultural progress and innovation. It was during this period that Arab scholars protected the European intellectual achievements that had previously taken place and built upon them, thus providing a foundation for the later European Renaissance.

Al Hazza and Lucking (2015) attempt to demonstrate that the historical contribution of the Arab world to contemporary thought has been significant and important and is noteworthy of inclusion in contemporary Western secondary school curricula. If the contemporary curriculum acknowledges historical Arab contributions to our collective heritage, then the process of alienation of significant sections of our community can be diminished and their engagement with the learning process augmented.

3.2 Summary.

In summary the literature infers a Middle Eastern umbrella culture that is deemed to be at risk, and specifically the cultural identity of Kuwaitis and their traditions which are deeply rooted is essentially being challenged by the majority expatriate and general Western influence. Cultural sensitivities are generating a perceived threat in the wake of economic change, such that a perceived need to preserve and strengthen the Islamic identity and Arabic traditions is emerging, which impacts on attitudes toward modernisation, practices of management, and education.

The literature identifies value systems that are deeply rooted in the culture and society are significant factors that impact on learning style preferences, and draws attention to fundamental differences between the predominantly Western individualistic value system as opposed to the more collectivist value system characteristic of Arabic cultures, suggesting that the learning process has a strong socio-cultural influence acting upon it. These differences are seen to manifest for example in collectivist societies in the learning situation as a

preference for avoidance of confrontation, maintenance of group harmony, and saving face; whereas in individualistic societies we tend to see a preference for openness and direct discussion with a need to address differences of opinion. This has been demonstrated to translate into a predilection for a learning environment that is more teacher-centered, formal and traditional in nature by collectivist cultures, characterised by greater rigidity in the structure of the learning process. Consequently contemporary Western style teaching and learning strategies can be viewed as severely challenging for students immersed in a collectivist culture, by virtue of their past learning experience and what they have been used to, and the disparity of preference for a teaching and learning style that impacts on their motivation to engage with learning. The challenges facing international schools have been addressed with reference to cultural adjustment of expatriates; the possible dissonance between the educational values of expatriate teachers and the host culture; the suggested need to avoid outright policy and curriculum borrowing without appropriate modifications commensurate with the host culture and traditions; and the significance of the absent or hidden curriculum in terms of student engagement, motivation, and self-esteem.

The literature brings to light an apparent lack of congruence between the contemporary Western notions of teaching and learning, and the implementation of such models in Arabic societies, arguing that there seems to be a serious lack of consideration given to the differences between Islamic-Arab cultural traditions and ways of being compared to the contemporary Anglo perspective. As a consequence we see curriculum interventions that are often less relevant and effective in the different culture to which they evolved in, compounded by Western practitioners who experience difficulty in comprehending the nature of the cultural dissonance in which they find themselves by virtue of their own previous socio-cultural immersion, illustrated for example by the implementation of NVQs in Oman.

A striking theme emerging from the literature is the religious dimension. Islam permeates all aspects of life in the Arab world, and is given immense status and importance. The spiritual dimension of mankind and preparation for the life after death is real and imposing, and people are constantly mindful of this duality in

their daily lives. As such, we see a striving to achieve balance between the worldly materialistic emphasis on life with spiritual development and fulfillment. This inevitably colours the Arabic perception on innovation and change, and impacts on attitudes and values. What might be argued to be the Western contemporary preoccupation with the materialistic and growth of material wealth has been argued to contribute to a sense of suspicion and unease regarding Western interventions in economic development.

Finally the literature suggests that status issues are significant in terms of a notable preference in Arabic society for white collar occupations, creating a pressure on students to achieve highly at school and university.

The main themes emerging from the literature considered so far include a perceived threat to cultural identity; the significant religious dimension; inappropriately conducted curriculum interventions; the disparity between Western notions of teaching and learning and the Arabic cultural expectations; learning style preferences in the Middle East; and status issues, collectively suggest there is a tension implicit in the process of Arabic nations adopting Western interventions to facilitate their economic development.

CHAPTER FOUR.

THE DISAPPLIED BRITISH NATIONAL CURRICULUM.

In this chapter, I explore the disapplied British National Curriculum (NC) as an example of a Western conceived intervention in the Middle Eastern context, some of the ideology of which continues to be implemented in the school in which this research study took place. Disapplication of the NC used in this context is not to be confused with the legislation and processes that explain when and how national curriculum programmes of study and assessment arrangements may be disapplied, relating to the Education Act 2002 (sections 90, 92 and 93). The disapplied national curriculum is used in this thesis with reference to the following statement that appears in the national archives relating to the Secondary National Curriculum until 2014:

> From September 2013 the current national curriculum programmes of study, attainment targets and statutory assessment arrangements will be **disapplied** *(my emphasis)* for all subjects at key stages 3 and 4. This means that schools will still be required to teach the relevant subjects, but will have the freedom to adjust their curriculum to help prepare for the introduction of the new national curriculum from September 2014 (September 2015 for key stage 4 English, mathematics and science). (Department for Education, 2014. National Archive web page 1).

The term disapplied National Curriculum is used in this sense across several Department for Education documents, including the Department for Education (2014) National Curriculum Reform: Key Stage 4 Core Subjects Consultation on Draft Order and Regulations document, section 2.1 p5.

Whilst the term National Curriculum of England is used in England, international schools around the world commonly refer to this as the British National Curriculum in their prospectus. Some examples of schools that do this are: Braeburn Mombasa International School; Isamilo International School Mwanza; Kennedy House International School; The British School of Quito; Emirates International School; American Academy Nicosia; Canterbury School Gran Canaria; British School of Nanjing. A brief search for the term British

National Curriculum in Wikipedia reveals a host of international schools using the term British National Curriculum in their descriptions.

The history of the disapplied NC development is considered, together with its aims and purpose in the context of its suggested link to knowledge economy facilitation in the global economy. The history of disapplied NC changes leading to the implementation of How Science Works (HSW) as an important strand of science education in schools is considered, contextualizing the specific focus of this research study (in the Edexcel A-level curriculum). Evidence is considered suggesting that implementation of HSW in the British context has been implicated with an experience of tension. Criticism of the disapplied NC by the current UK government is addressed leading to the emergence of the new NC effective from September 2014 in UK maintained schools.

The Education Reform Act of 1988 instigated the introduction of the National Curriculum in England, Wales, and Northern Ireland. This nationwide curriculum applied to state schools, but not independent schools, and was intended to ensure that all state schools followed a common standardised curriculum. Part of the purpose of this reform was to establish a common baseline of assessment data that would become available to facilitate the compilation of league tables by which parents could make informed choices about which schools might be suitable for their children. This new notion of parental empowerment regarding choice of school in the state sector was designed to encourage the free market principle of open competition and choice (Education Reform Act, 1988).

Apart from setting down a common curriculum of factual knowledge that children would be expected to be familiar with, the disapplied NC placed emphasis on a range of principal aims and purposes, among which were included: the development of confidence in capacity to learn; working collaboratively and independently; promoting ability to think rationally with an enquiring mind; develop appreciation of the global dimension in people's lives; creative and critical thinking to solve problems; develop capacity to be enterprising and innovative leaders; ability to distinguish between right and wrong; develop understanding of other cultures; cultivation of enduring values; develop capacity to challenge stereotyping and discrimination; facilitate making independent

decisions based on informed judgments; ability to relate to others; learning to manage risk; and learning to cope with change. (Qualifications & Curriculum Authority, 2004). These notions embedded within the disapplied NC seem to resonate strongly with some of the issues associated with cultural dissonance and the emergence of tension, addressed in the previous chapter, where the concept of Anglo individualistic value systems in contrast to Arabic collectivist value systems, and the impact of these value systems on learning preferences was discussed. From this perspective the disapplied NC embraces some values that can be argued to sit uncomfortably with the cultural expectations of Arab society and the suggested learning preferences of Arabs by virtue of their socio-cultural immersion and past experience.

Additionally, at key stage 4 children were expected to develop an insight into how their work could pave the way into further education and subsequent employment. It is interesting to reflect on some of the broader value statements that underpin the disapplied NC. For example, reference is made to the values of society and the characteristics of the society we (Anglos) would like to have, and consequently it is seen as imperative that these common values and purposes should reinforce the education process (Qualifications & Curriculum Authority, 2004 p10). The school curriculum is considered to play an important role in developing a child's sense of identity through addressing the moral, social, spiritual, and cultural heritages of British society, and the wider dimensions of Europe, the Commonwealth, and the globe. (Qualifications & Curriculum Authority, 2004 p11). There is an expectation that education in schools will establish a foundation for a process of lifelong learning. (Qualifications & Curriculum Authority, 2004 p11). Education is seen as needing to be responsive to economic and social change, and as such there is an expectation that teachers must adapt their pedagogy to meet the needs of children in the context of social, cultural, and economic fluctuation. There is a value statement implying that education can only be effective if the process and its values adapt to the requirements of the time. (Qualifications & Curriculum Authority, 2004 p13). What is salient here are the questions of whose social and cultural heritage are we talking about? Is the concept of lifelong learning valued in the same way by all cultures? Being responsive to who's social and economic change? Adaptation

to time in which social & cultural context? When one considers these questions, it becomes apparent that exporting the British disapplied NC into, for example, the Middle Eastern context may not be entirely appropriate, not least because the curriculum comes with embedded social and cultural value systems that may not be entirely congruent with those of the host society. I would also suggest that there are echoes in these value statements that resonate with the notion of education being considered a service to economic activity and neoliberalism, discussed earlier.

The disbanded Qualifications and Curriculum Authority (QCA) had a pivotal role in the development and monitoring of the disapplied NC (QCA 1 archived website) and so it is prudent to consider the nature and ideology of this organisation. The QCA was established in October 1997 through a merger of the National Council for Vocational Qualifications and the School Curriculum and Assessment Authority. The function of QCA was established through legislation under section 21 of the Education Act 1997. In 2010 the former Department for Children, Schools and Families (DCSF) became the present Department for Education. The Secretary of State for the DCSF changed the regulatory functions of the QCA in 2007, creating the Office of Qualifications and Examinations Regulation (Ofqual). Ofqual at this time now became statutorily independent of QCA and took on the regulatory role for external examinations and assessment boards that had previously been the province of QCA. The remaining QCA functions were amalgamated into the Qualifications and Curriculum Development Agency (QCDA). These two separate bodies, Ofqual and QCDA were vested in April 2010. The following month the Secretary of State for Education announced and confirmed his intention to introduce legislation to abolish the QCDA in the Autumn of 2010, and in 2011 the former QCDA functions were transferred to the newly formed Standards and Testing Agency. (QCA Annual Report & Accounts, 2009-10; QCDA archived website).

The specific remit of the former QCA is legislated in the Education Act 1997 sections 22-26. The overall role of the former QCA was to advance training and education in England and to promote quality and coherence in this respect. Some of the more specific functions relating to the curriculum and school examinations relevant to this study included: advising the Secretary of State

regarding issues on research and development, and on the approval of qualifications for school based curricula; audit assessments quality. Specific functions relating to external qualifications included: publishing information and advice for the providers of courses following examination curricula; develop criteria for accreditation of external qualifications; advise the Secretary of State regarding the accreditation and approval of external qualifications. The QCA became the body that had been granted, through Section 24 of the Education Act 1997, the right to regulate the entire external qualifications network in England. Funding of the former QCA came from Grant-in-Aid provided by the DCSF, and from the Department of Employment & Learning in Northern Ireland, and from the Department for Children, Education, and Lifelong Learning & Skills in Wales. (Education Act, 1997; QCA Annual Report & Accounts, 2009-10).

Analysis of the former QCA archived website reveals how this body understood its role in relation to education. The disapplied NC was described by QCA as a form of education to which children were entitled. Furthermore this notion of education was considered by QCA to define the knowledge, skills, and understanding that constituted this entitlement, the content and development of which was under the control of QCA. It was QCA that kept the NC under evaluation with respect to the appropriateness and relevance of the curriculum content with respect to the perceived changing needs of society at large and the needs of children in that society. (QCA 2 archived website). Not only was QCA responsible for the NC in this way, but also the development and maintenance of the associated national assessment tests and examinations. (QCA 1 archived website).

QCA had a regulatory function with regard to public examinations, again with respect to monitoring their relevance and appropriateness to the needs of society and its learners. (QCA 2 archived website). A national qualification framework was developed by QCA, including National Vocational Qualifications (NVQs) which was reviewed regularly and accredited based on the ability of these qualifications to meet the perceived needs of not only learners, but also those of employers and the economy. (QCA 2 & 3 archived website). QCA described itself as the leader in the field of developing curricula, assessment tests, and qualifications through examination with the intention of building an

education and training framework that would be world class in fulfilling the needs of business, industry, society, and people. (QCA index & 4 archived website). QCA influence extended into the entire public examination system, including General Certificates of Education (GCSE), General Certificate of Education (GCE) at advanced level (A level), Advanced Extension Awards (AEA), GNVQs and NVQs, and basic skills entry qualifications. (QCA 3 archived website).

So the status quo at the time of QCA was a situation where we had a single body legislated for in the 1997 Education Act, that dominated education through curriculum development, assessment tests, and qualifications regulation, all of which were influenced by the political ideology of QCA by virtue of its perception of the needs of learners in relation to the needs of the economy. Indeed QCA made the following statements on its archived website:

> QCA has a pivotal role in helping the UK become the most dynamic knowledge-based economy in the world. (QCA 1 archived website, paragraph 2)
>
> High quality vocational learning and qualifications are the key to developing the country's workforce. (QCA 3 archived website, paragraph 1)
>
> Governments, employers and unions have embraced education and training as powerful tools to build the economy. (QCA 3 archived website, paragraph 3)

Clearly there is an established link between the former QCA and neoliberal ideology inherent in knowledge economy development.

The development of QCA policies with respect to improving learning and raising achievement levels was informed by working with "partner bodies" to establish research and evaluation, and to identify key tendencies in the education system. (QCA 4 archived website). Who were these partner bodies? QCA stated that its board of governors came from leaders in not only education, but also business and training. (QCA 1 archived website). It also stated that its partners included the OECD, the EC, CEDEFOP, the British Council, and various international ministries of education. (QCA 4 archived website, paragraph 3). The political roles of the OECD and EC have been touched upon in chapter one. CEDEFOP or the European Centre for the Development of Vocational Training was founded in 1975 and is one of the European Unions' decentralised agencies. It supports

and contributes to the development of policies and their implementation with respect to European vocational and educational training associated with the European strategy for economic growth and competition through knowledge and innovation. CEDEFOP states that this strategy is reliant on the successful development of appropriate innovative skills in the European workforce that will facilitate effective competition in the global market place. (CEDEFOP webpage).

What emerges from this discussion is a clear connection between the former QCA, and therefore the disapplied NC, and neoliberal political influence on the education process. The disapplied NC can thus be viewed as a neoliberal political intervention in our education system in the UK, and where this curriculum or aspects of it are exported to other countries and cultures, it can also be considered to become an equivalent intervention there as well. Apart from the QCA being associated with the above mentioned organisations, it also worked closely with other former organisations such as the Department for Education and Skills (DFES); the Adult Learning Inspectorate (ALI); the Learning and Skills Council; the Office for Standards in Education (OFSTED); the Teacher Training Agency (TTA); the General Teaching Council (GTC); and various employers' organisations. (QCA 2 archived website).

Given this background to the former QCA and its successor, the QCDA, it is interesting to reflect on the reasons for closure of the QCDA, implemented through legislation by the Right Honourable Michael Gove the former Secretary of State for Education. In a letter from Mr. Gove addressed to the Chair of the QCDA Mr. Christopher Trinick in September 2010, Mr. Gove outlined the guiding principles of the Coalition Government's education policies founded on the importance of "… freedom, responsibility and fairness …" (Gove, 2010 p2). It was noted that there was a perceived "… need to refocus the curriculum on core knowledge and content …" (Gove, 2010 p2) and to ensure that "… standards are driven by school leaders and teachers …" (Gove, 2010 p2). The letter also made reference to "…offering parents more choice…" (Gove, 2010 p2) and "…functions that need to be done at a national level should be properly accountable through Ministers…" (Gove, 2010 p2). Clearly it was felt by government that the remit of a single body, the QCDA, was unhealthily influential and that the balance of influence in education needed to be redressed, returning

a measure of autonomy and influence to the teaching profession. Also that there needed to be a return to a more content laden and core knowledge based curriculum, distinct from a disproportionate emphasis on skills based learning.

Of specific interest and relevance to this study is a major change that occurred in the science curriculum, which saw the emergence of an integral component within science teaching and the NC known as *How Science Works (HSW)*. A series of revisions to the NC between 1989 and 2004 established attainment targets related to scientific inquiry in the science curriculum, and in 2004 HSW became a central and integral theme in the NC science teaching at Key Stage 4 (GCSE), and was implemented in schools in 2006. (Qualifications & Curriculum Development Authority, 2007). Further implementation of HSW at Key Stage 3 (Years 7 – 9) occurred in 2008. The changes to the NC in 2004 stemmed from a seminal document "Beyond 2000" (Miller & Osborne, 1998), which was the culmination of a series of seminars under the auspices of the Nuffield Foundation advocating a need for developing scientific literacy in learners as an essential tool for twenty-first century citizens. This document instigated the Twenty First Century Science Project pilot study from 2000 to 2003. According to the Twenty First Century Science Pilot evaluation report (Burden et al., 2007) "scientific literacy" is understood to mean enhancement of the ability to interpret scientific information and make informed decisions based on that information (Burden et al., 2007 p3). This evaluation report was used to inform the development of HSW in the NC.

Central to the HSW integral component of science teaching in the NC was the importance attributed to the development of critical thinking, creative thinking, and flexible problem solving skills. These overarching skills were divided into two strands of development to be utilized in the ability to engage with explanations, arguments, and make decisions; and the ability to engage with practical enquiry skills. Central to these skills is the ability to undertake critical analysis and to be able to link evidence to support or refute theories and ideas; the ability to understand the evaluation process of evidence through critical interpretation of data; and the ability to appreciate and understand the influence that culture, politics, and ethics may have on the evidence available. The explanations, argument, and decisions sub strand of HSW skills development is concerned

then with influencing ideas and decisions involving specific skills sets of developing explanations, challenging ideas, collaborating with others, developing arguments, communicating with an audience, and cultural sensitivity. The practical and enquiry sub strand has a focus on critical interpretation and evaluation through processes of planning, selection and management of variables, risk assessment, gathering of reliable and valid data, and working critically with data. These skills were considered not only important from a science education perspective, but also from the perspective of developing a set of transferable skills which could be called upon in a variety of other situations. It was also considered vital that the HSW aspect of science in the disapplied NC should be taught as an integral component, and not something that was bolted on to the core academic knowledge detailed in the examination board specification. (Teachfind National Strategies: How Science Works)

The curriculum text for the Edexcel A level Biology course (Pearson Education Limited, 2013 p1) makes reference to a specification design that is intended to be engaging and inspiring, and emphasises a need for a fundamental understanding of biological ideas in order for students to be able to engage positively with contemporary issues in society. Up-to-date contemporary issues are included in the specification, for example genetically modified crops; stem cell research; and comparative DNA analysis. In addition to the educational objectives of the specification, important and arguably political aims are stated to be the attraction and retention of more students into advanced level studies in biology; the development of career aspirations in biology related to future occupations; the development of an appreciation of how decisions in society about biology related issues are made; and the development of an understanding of how biology makes an important contribution to society and economic success (Pearson Education Limited, 2013 p1). The requirement to develop the skills, understanding and knowledge of HSW is emphasised at all stages in the summary of assessment requirements (pp8–9) reiterating the central importance attributed to the integral HSW components of the specification. In addition to the assessment objectives of knowledge and understanding (AO1), and the application of knowledge and understanding (AO2), of which HSW is an important part, HSW also appears as an independent

assessment objective as well (AO3) pp1-10). The knowledge and understanding criteria, and the practical and biological investigative skills criteria (pp10–11) are intimately associated with the HSW criteria and learning outcomes (pp12-13). A summary table of the HSW statements mapped to the learning outcomes and investigative skills produced by the teaching department of the school in which this study took place is presented in appendix 5f on p257. The specification gives a choice of two teaching and learning styles, both of which are based on the Salters-Nuffield Advanced Biology Project. The concept-led approach adopted by the science department of the school that is the subject of this research study explores the practical applications of a foundation in the theoretical principles of biology. This is distinct to the opposite context-led approach which begins with a consideration of biological applications in society followed by attention to the theoretical foundations that underpin those applications. The concept-led approach was chosen historically because the students were used to a theoretical approach to the subject accompanied by practical investigations to support and develop their understanding.

Of relevance to this study is the nuance that whilst educational intrinsic aims and objectives form an important part of the process of historical educational policy development, it is also important to appreciate plausible political instrumental agendas in the process as well. There is arguably tangible evidence to suggest that the school science curriculum was linked to the knowledge economy by government stakeholders from a position of authority over those stakeholders involved in science curriculum reform, and as such HSW became implicated because it formed an integral and inseparable part of the school science curriculum, and was informed by the science curriculum reform process between 1998 and 2006. In this regard I want to draw the readers' attention to the process of school science curriculum reform in England from 1998 to 2006. Ryder and Banner (2011) present a chronology of the key proceedings that led to the science curriculum reform in 2006 (p5). Among reports that were instrumental in the development of educational policy were the Beyond 2000 report (Miller and Osborne, 1998); Evaluations of the 21C pilot (2005 – 2006) (Burden et al., 2007); and the Government ten-year Science and Innovation Investment Framework (2004) (HM Treasury, DTI and DfES., 2004). Ryder and

Banner (2011) examine the policy texts of these seminal documents, and suggest that they have identified imperative instrumental (political) aims, along with the intrinsic (educational) aims. Categories of stakeholder were identified holding a social, individual, political, or economic interest. It is suggested that those projects where intrinsic social and individual emphasis were central became significantly influenced by stakeholders to oblige the aims of politicians and the needs of the economy. It is noted that the policy texts tend to be expressed in terms of "the public good", but suggest that a hidden agenda of interests and values is represented by virtue of the context of influence on the documents (Ryder and Banner, 2011).

The Beyond 2000 (Miller and Osborne, 1998) report outlines the majority stakeholders (p32) as being university academics with a professional concern and awareness regarding science education in schools, and were not explicitly part of government. The motivation of these stakeholders stated in the report (p5) was to address the growing perception that the science curriculum at that time served the interests of a minority of school children who would go on to become scientists and engineers, and that there was a sense of irrelevance to the needs of the majority. The stated aims for a reformed science curriculum were threefold. Firstly an acknowledgement that the curriculum should continue to prepare able children for future training and occupation in the sciences. Secondly the curriculum should inspire enthusiasm and interest in science. Thirdly there was a perception that scientific literacy should be encouraged and supported, and this aim was the most prominent throughout the report. Although the stakeholders were non-governmental, Beyond 2000 was recognised by government officials as being influential on the school science curriculum and required a response. This government response came in the form of the QCA curriculum project (2000), which was initiated by QCA in 2000, and entitled 'Keeping School Science in Step with the Changing World of the 21st Century' (Hollins, 2001). This project consisted of three studies addressing the meaning of scientific literacy; methods for assessment of science and issues around socio-scientific understanding; and the aims of scientific literacy in schools. There was a strong emphasis on preparing children as future citizens who would be able to engage with contemporary science issues addressed in the media in

the first study. According to Ryder and Banner (2011) the stakeholders in the QCA curriculum project were similar to those of the Beyond 2000 report, but also included school teachers. Attention is drawn to criticism that emerged in the QCA curriculum project relating to the goals and meanings associated with scientific literacy; a curriculum that could facilitate engagement with contemporary science issues in the media; and a curriculum that could increase the motivation of the majority of children to engage with science in schools more positively. Ryder and Banner (2011) argue that despite these criticisms, further projects in the chronology of the development and reform of the school science curriculum appear to have marginalised these concerns.

The 21C (Burden et al., 2007) science project developed further the notions of scientific literacy and the provision of a suitable foundation in science for further study. The project also included the "nature of science" and how this interfaced with social and ethical issues in society. Up to this point in the chronology of school science reform documents, the stakeholders and overall aims of the documents seem to remain fairly consistent. The 21C pilot began in schools in 2003 under the auspices of QCA, but only the first of two evaluation reports were used by government to justify rolling out the curriculum reform nationwide. A subsequent more extensive evaluation in 2004 was not taken account of before the reform was put into practice in 2006 (Ryder and Banner, 2011). The revised curriculum for science, published in February 2004 (Department for Education and Skills / QCA (2004)) placed emphasis on encouraging more children to study science subjects with the stated intention of encouraging more children to enter science study in higher education. Of interest is the sudden change in emphasis to a perceived need for more people to study science. The main emphasis of scientific literacy prominent in the preceding reports from 1998 onwards was no longer explicit. This government / QCA publication also included additional aims such as the importance of factual scientific information providing a sound basis for understanding the world around us, and training to think in ways valued by industry. Ryder and Banner (2011) make an interesting observation that this new emphasis on post compulsory participation in science education reflected policy within a range of government initiatives. The Government ten-year Science and Innovation Investment Framework, 2004 (HM

Treasury, DTI & DfES, (2004)) for example highlighted a severe shortfall of scientists and engineers and emphasised the importance of science to the economy. As noted by Ryder and Banner (2011) and Ball (2008):

> This reflects an increasing articulation of education policy as economic policy within the 'knowledge economy'. (Ryder and Banner, 2011 p716).

Ball (2008) examines policy documents and speeches relating to education reform and reasons that economic imperatives have increasingly dominated the process. He argues, through an analysis of the contradictions entrenched within education policies, that such policies can be viewed as being essentially driven by an ideology of commercialisation of knowledge that reduces the function of education to that of a commodity serving the needs of the knowledge economy. At risk, it is argued, is the professional ethic that has traditionally been associated with education being superseded by the new contemporary value system of business and commerce, referred to elsewhere in this thesis as the monetary code of value, resulting in the gradual loss of the intrinsic worth of education. Of particular interest are the discussions around the marginalisation of social principles with an increasing emphasis on the purpose of education being distorted to serve the interests of economic competition. (Ball, 2008).

Ryder and Banner (2011) suggest that the motivation of politicians to implement the revised science curriculum prior to the full evaluation report on the 21C project, remains obscure. What is evident however is the government made an explicit decision to override the stakeholders involved in the earlier reform documents, subjecting the science curriculum reform process to neoliberal political influence.

Whilst it is evident that the earlier emphasis on scientific literacy became marginalized in subsequent government publications, it is interesting to reflect on suggestions as to how scientific literacy became an issue in the science curriculum to begin with. MacMillan (2004) discusses UK government science policy during the late nineteen nineties to the turn of the millennium, highlighting two key strands of political thinking. Firstly the challenge of innovation, where there is a perceived need to improve the translation of research into products that are marketable. Secondly the notion of risk associated with public

understanding and trust with regard to scientific issues and the governance of science. It is argued that the second strand of policy emerged and developed significantly in response to a number of controversial science issues that have triggered public concern in the wake of media attention, such as genetically modified crops and stem cell research. Damage to public trust in the governance of scientific developments in such areas of research had become cause for concern with the emergence of a corresponding policy objective to repair this damage. It is suggested such policy became manifest because of a perceived negative impact of public opinion on economic development relating to science issues:

> …the nation will only reap the rewards of science and innovation, if public concerns are addressed… Unless more effort is made to engage the public in science, popular risk-aversion threatens to scupper the UK's promise to be a global player in science and technology. (MacMillan, 2004 p6).

Indeed this concern was made quite explicit in the UK government's ten year Science and Innovation investment framework 2004 – 2014 (HM Treasury, DTI and DfES, 2004) where there are statements that suggest public lack of understanding of scientific advances has the potential to inhibit social and economic progress in the UK:

> Researchers and policy makers must earn public confidence and trust in science … ensure that society's understanding and acceptance of scientific advances moves forward, and does not become a brake on social and economic development in the UK. (HM Treasury, DTI and DfES 2004 p156).

This idea of public scientific illiteracy being fundamental to the manifestation of public concern and distrust began to emerge in the Bodmer report (The Royal Society, 1985) and was subsequently addressed by government promoting the notion of education in science as a means to improving the ability of the public to engage with scientific issues in society. Thus science education in a sense became implicated in economic considerations and concerns. According to a report by the House of Lords Select Committee on Science and Technology published in March 2000 (House of Lords Select Committee on Science and Technology, 2000) this issue of public scientific illiteracy and its relationship to a politically perceived threat to economic progress was deemed to be most acute

when there existed an apparent conflict in the scientific evidence presented surrounding a particular debate, for example the benefits and risks of stem cell research, and the controversy surrounding genetically modified crops. However this acuity seemed to be most pronounced where debate surrounding scientific issues failed to give adequate attention and recognition to the ethical, social and economic concerns implicit in the scientific research. Against this backdrop of political concern with public scientific illiteracy and its potential impact on economic development, the most vigorous embodiment of government thinking and policy on this issue at that time was made explicit with the publication of the UK government's ten year Science and Innovation investment framework 2004 – 2014 (HM Treasury, DTI and DfES 2004).

> Harnessing innovation in Britain is key to improving the country's future wealth creation prospects. For the UK economy to succeed in generating growth through productivity and employment in the coming decade, it must invest more strongly than in the past in its knowledge base, and translate this knowledge more effectively into business and public service innovation. The Government's ambition … is for the UK to be a key knowledge hub in the global economy…" (HM Treasury, DTI and DfES, 2004 p5).

It is in the philosophical and political statements that were central to the scaffold on which science curriculum reform was to proceed, one begins to discern a suggested plausible link between the politics of the notion of knowledge economy and the school science curriculum.

The ideas laid out in Beyond 2000 (Miller and Osborne, 1998) were envisaged to provide a platform for the development of a framework for a more relevant and meaningful school science curriculum, and were subsequently refined and developed in the UK government's 2004 framework (HM Treasury, DTI and DfES, 2004). Reference is made throughout these documents to the notion of specific skills that it was felt needed to be facilitated by a reformed curriculum that would enable appropriate engagement with contemporary scientific debate. Examples include the importance attributed to facilitating: critical engagement with contemporary scientific issues and arguments; appreciation of the strengths and limitations of scientific evidence; identification of correlations … and probability (such as the links between smoking and lung disease, or between saturated fat consumption and heart disease); sensible assessment of risk;

recognizing and engaging with ethical and moral implications; emphasis on the ability to engage in discussion; evaluating, interpreting and analyzing evidence.

Several universities were briefed to investigate how the notion of scientific literacy might be integrated into the school science curriculum in order to facilitate the development of "scientifically literate citizens" (House of Lords Science and Technology Committee, 2006 p193). From this work the University of York proposed a curriculum model on which a suite of pilot GCSE courses were developed under the control of QCA, which had been requested by the Secretary of State to review the national curriculum at key stage 4. (House of Lords Science and Technology Committee, 2006 p193). The QCA criteria that governed the development of the KS4 science curriculum included the skills, knowledge and understanding of HSW which were derived from the intrinsic educational concerns at that time, articulated in the Beyond 2000 report (House of Lords Science and Technology Committee, 2006 p195) but also arguably from the instrumental political and economic concerns of the subsequent 2004 government framework document, and were built upon in the development of the A-level specification. *How Science Works* (HSW) was subsequently integrated into the Edexcel A-level biology programme of study, and is explicitly referred to at the beginning of each section of the specification as an important and integral component of all aspects of the learning process (Pearson Education Limited, 2013).

Indeed QCA makes it very clear that the HSW criteria must include very specific skills, knowledge and understanding, and that these must be integrated into the mandatory specification content (Qualifications and Curriculum Authority, 2006). Section 3.6 includes statements relating to: modifying existing explanations using theories, models and ideas; posing questions; presenting arguments; risk management; data analysis and interpretation; recognition of correlation and causal relationships; resolving conflicting evidence; evaluation of evidence and methodology; appreciation of the tentative nature of scientific knowledge; communication skills; benefits and risks of science issues; ethical considerations; and the peer review process in validating new knowledge (Qualifications and Curriculum Authority, 2006 p4 section 3.6). For me there is a clear and very strong resonance between these statements that govern HSW,

and the statements discussed earlier that appear in Beyond 2000 and the 2004 government framework document, relating to the notion of specific skills that it was felt needed to be facilitated by a reformed curriculum that would enable appropriate public engagement with contemporary scientific debate.

What I think emerges from this discussion is a suggested plausible link between the process of school science curriculum reform leading to the integration and implementation of HSW within science teaching and learning, and the instrumental political concerns earlier on in the process relating to public scientific literacy and how that was thought to impact on the economy in terms of acting as a potential brake on scientific innovation. The discussion draws our attention to not only intrinsic educational motivation in the process, but possible plausible instrumental political motivation, which was linked to economic concerns.

Clearly the ideology underpinning the HSW component of the disapplied NC can be regarded as a significant departure from the traditional science curriculum of content based knowledge that aims to equip children with a sound knowledge base that will give them a basic understanding of science for life, and a solid foundation for more advanced study. I would suggest that many of the skills advocated by HSW were traditionally skills that would be developed at a much later stage than school education, as part of some form of higher or further education by a relatively small cohort of academically able students. To expect the average child in schools to engage with these higher order thinking skills could be regarded as idealistic, and likely to hinder the process of children absorbing a solid academic foundation that will support further development. Based on my argument presented so far, addressing the notion of political intervention in the education system and the reconfiguring of education as a service to economic activity, I contend that there is a strong case for suggesting that the disapplied science NC with its integral HSW component had as much to do with a political idea or belief that education could be utilised as a powerful tool for economic development and competition in the global market place, as it had to do with how children learn effectively, and has contributed to a sense of tension for teachers and students amidst its implementation, particularly where there is a cultural dissonance associated with the curriculum development

culture and its practitioners, and that of the target culture into which the curriculum is implemented.

Further evidence for the existence of this tension emerged from a longitudinal study which focused on the implementation of HSW in a cohort of English secondary schools over a period of three years (Toplis and Golabek, 2011). The study involved university researchers working with seventy pre-service teachers in their school field work phase of teacher training in the London area, following complete implementation of HSW during 2008 - 2010, and provides insights into how the HSW initiative had progressed in these schools by identifying trends in the implementation process. The researchers were particularly interested in the role of pre-service teachers as implementers of HSW, because they suggest that it is new entrants into the teaching profession that are most likely to embrace the changes in thinking and ideology that underpinned HSW (Braund and Campbell, 2010 cited in Toplis and Golabek, 2011) and are therefore more likely to become models of what is considered “good practice” by those who advocate the HSW ideology. From this suggestion it is reasonable to infer from my own perspective that the researchers acknowledged and anticipated resistance to HSW implementation from established and experienced practitioners. The research questions that guided the study addressed the shift in paradigm from teaching content to conceptual understanding; and associated pedagogical changes with the inherent shift in ideological thinking, teaching methods; and teaching resources. The qualitative method involved collaborative categorisation of emergent themes from answers to emailed questions in phase 1, and data collected from discussion groups in phase 2.

The findings of the study suggest that implementation of HSW could be perceived as falling on a continuum, with what the authors term “creative implementation” at the positive extreme, and “restricted implementation” at the negative extreme. Generally on the positive side, the findings support the existence of trends which reflect an increased understanding of HSW and the process, together with an increase in consensus with regard to how HSW can develop transferrable skills and higher order thinking skills advocated by Blooms taxonomy (Bloom, 1956); a move toward facilitation of learning through processes rather than teacher lead impartation of content with more emphasis

on active child-led learning and less emphasis on the child as a passive learner, with the children taking on more responsibility for planning practical investigations and engaging with debate and discussion; higher ability children engaging with and responding positively to evidence based thinking and critical evaluation. However, the study reports that these positive trends were in the minority, and highlights a range of issues including: Evidence that established teaching staff were unsure of the nature of HSW, and that HSW was meeting some resistance in terms of lack of integration into existing science schemes of work and lack of departmental support; evident difficulty with and resistance to the required pedagogical change from factual knowledge based learning to concept and skills based learning; science departments continue to place emphasis and importance on assessments and teaching the academic content of specifications, with practicing of past paper questions as the time honoured route to successful examination results; reports of a sense of tension relating to time constraints and the need to complete an academic content heavy curriculum with perceptions of HSW slowing down the whole process in order to engage with the skills based content effectively; lower ability children experiencing major difficulties engaging with the higher order thinking skills resulting in disengagement and class management issues; difficulty implementing effective differentiation at the right level resulting in more able children losing interest; evidence that at key stage four the pressure of external examinations results in children and staff instinctively feeling more comfortable with the traditional teacher-centered approach (Toplis and Golabek, 2011).

Clearly the forgoing study suggests that the implementation of HSW in the participant schools in England at that time was far from comfortable, and fraught with difficulties, creating a sense of tension in the process. If that is suggested to be the case in the home culture for which HSW was intended, then it is reasonable to assume that implementing HSW in a very different culture, with different expectations of teaching and learning such as the Middle East, is also likely to be a difficult process and perhaps more so, giving rise to tensions in the teaching and learning process. From my own perspective as a Head of Department, and an experienced teacher of some thirty five years, twenty of which have been spent in Kuwait, the findings of Toplis & Golabek (2011)

resonate with my own experience in the school in which this study took place. How Science Works was an unknown entity in Kuwait until around five years ago. The curriculum and teaching and learning approach was and had been quite traditional for many years. Children in the lower school (11 – 14) followed a science curriculum that in common with many private schools in England, did not follow the British NC, partly because the NC was not considered an appropriate foundation (see below) for the more academically rigorous and demanding International General Certificate of Education (IGCSE) courses (QCA, 2006) delivered in the upper school at ages 14 – 16 in common with many private schools in Britain. It should be noted that private schools in England are free to choose their own curricula and external examinations and that many have selected the more demanding IGCSE as distinct from the GCSE adopted by English state schools, and these examinations are not tied to the NC. It should also be noted that government ministers have made calls for state schools to be facilitated to enter their children for the IGCSE examinations, but QCA undertook a study (QCA, 2006) to compare the two sets of examinations and concluded that because IGCSE curricula do not follow equivalent NC KS4 programmes of study, IGCSE examinations would not qualify for state funding.

Corlu (2014) notes that the IGCSE was developed specifically for those schools in the international setting that offer a British curriculum, and these examinations have traditionally been implemented by such schools. Corlu (2014) notes that the IGCSE has become popular in international schools because of the clarity of curriculum content to be engaged with. Hayden and Thompson (1998) note that the popularity of the IGCSE relates to a perceived need for a more formal curriculum associated with an external examination system. Hayden and Thompson (1998) conducted a study which explored the perceptions of what constitutes a good education in an international school held by teachers and students. This study sampled perceptions of over three thousand participants across international schools in several different countries. Evidence from the study suggests that notions of learning to become tolerant, considering alternative perspectives, and acknowledgement that all cultures should be considered as equally valid (p555) are important components of a worthy international school education. Of particularly high importance emerging from the

study however is the perception that international schools must above all offer examinations that will facilitate entry into universities in a variety of countries, affirming the importance attributed to the "pragmatic aspects of the formal curriculum" (Hayden and Thompson, 1998 p558). Hayden and Thompson (1998) note that approximately 95% of international school students move on to some form of higher education and suggest that this is associated with the relatively high socio-economic background evident amongst the majority of students graduating from international schools. In essence the IGCSE curriculum is recognised as providing a sound preparation for external examinations by virtue of the clarity of learning content, and through the development of test taking skills and learning how to cope with examination stress. Corlu (2014) notes suggestions that the perceived importance of external examination systems pervades the school community, regardless of the pragmatic or idealistic aspirations the school may aspire to. Furthermore Hayden and Thompson's (1998) study suggests that the IGCSE is a good platform from which students may subsequently embark on more advanced studies in the sciences.

It seems that the management of the school in which this study took place has identified, for whatever reason, a need to maintain its accreditation by the British Schools in the Middle East (BSME) organisation (by whom it is accredited), and more recently is now seeking accreditation from the British Schools Overseas (BSO) organisation. This may well have influenced the decision to adopt the KS3 disapplied NC in the lower school. There also seems to be an aversion to taking on board the changes to the NC, with leveling for example which has been disbanded in the new NC, still being considered a valuable and important aspect of KS3 teaching and learning. The same applies to HSW and its underpinning skills based ideology, which no longer exists in the new NC as a core entity. It is interesting to note that the ideology being implemented in the school has a remarkable time lag in comparison to the UK. At the time when the UK was implementing the old disapplied NC and HSW, the school in which this study took place had remained traditional in its teaching and learning outlook and approach, and yet now we are witnessing attempts to implement old ideas that relate to the disapplied NC. It is almost as if the school management perceives that a way has been found to implement an educational ideology that they feel

comfortable with, after a long struggle against an historically entrenched traditional pedagogical paradigm, and are holding fast to this regardless of changes that are now being implemented in the UK. I would also suggest that the school management either remains ignorant of, or chooses to ignore the important issues of cultural dissonance that impact on pedagogical and curriculum intervention in the Kuwait context discussed in this thesis. However, my experience in the field is that these implementations in the school are facing significant opposition and resistance, and as such we are witnessing in a sense an ideological struggle that has an inherent tension. In common with the assertion of Toplis and Golabek (2011), the vanguard of advocates of HSW ideology in the school tends to be relatively young and inexperienced recent entrants into the profession. The underlying drivers for this change in paradigm are not clear, but it is not unreasonable to suggest that there could be a link between the KDP (Kuwait Development Plan) and the recent take-over of the business (the school is part of a conglomerate of private schools) by the higher management at head office. As previously discussed in chapter two the KDP envisages an increase in private sector management of schools, and the facilitation of the implementation of "modern" Western teaching methods as part of the modernisation of the education system in Kuwait. Just what exactly the Kuwait government understands by "modern Western methods" remains conjecture, and probably does not take account of the most up to date changes in UK policy, which I will now briefly reflect upon for purposes of completeness.

A review of the disapplied NC was announced by the former Education Secretary, Michael Gove in January 2011. To support the review process the Department for Education commissioned the National Foundation for Educational Research (NFER) with a remit to report on how other high performing educational authorities around the world organised their educational curricula. The report was based on information held by the International Review of Curriculum and Assessment Frameworks Archive (INCA). This archive, the content of which is supervised by NFER, focuses on teacher training arrangements, curriculum, and assessment frameworks together with government education policies for over twenty different countries. The data for countries that appear in the report (p2) were selected on the basis of their high

performance in the international comparative assessments, including the Programme for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Study (PIRLS). (Department for Education - Review of the NC, 2012a). It was noted by Wolf (2011) that despite the number of years the disapplied NC had been in implementation, less than 50% of UK students were achieving grades A* - C in both Mathematics and English at the end of KS4, and largely continued below 50% at age eighteen with only 4% of sixteen to eighteen year olds achieving at that level. Consequently many students in the fourteen to nineteen age groups were not successfully transferring into higher education and training or suitable employment. (Wolf, 2011 p8). At the time the international comparative assessments indicated that UK students were performing between average and above in reading, mathematics, and sciences. Government were intent on reforming the NC so that it compared favourably with other educationally high performing countries, but also to raise the performance comparator results so that the UK becomes one of the highest in the world. (Department for Education Review of the NC, 2012b). A draft NC was published in the summer of 2012 for public consultation during the early part of 2013. In the summer of 2013 a revised draft was published for further consultation. The new NC was published in the autumn of 2013 and began implementation in schools from September 2014. (Department for Education, 2013).

As I have perused various documents associated with the NC reform, it became apparent to me that some of the rhetoric in these documents provides an insight into an evident shift in ideological paradigm with respect to some aspects of teaching and learning, but remains consistent in terms of the political harnessing of education as a service to economic activity. Regarding the shift in paradigm, perhaps one of the most profound statements, I would suggest, is this:

> The new curriculum for all subjects contains the essential knowledge that all children should learn, but will not dictate how teachers should teach. (Department for Education, 2013. Background. Paragraph 2).

This statement seems to signify a key note, echoed in much of the rhetoric on NC reform, heralding a return to an increased emphasis on pupils acquiring a

core of essential knowledge (Department for Education, 2013. Issue. Paragraph 2), and a departure from the notion of a prescribed and imposed teaching methodology or pedagogy that is assumed to be up to date and better, returning professional *autonomy to schools and teachers* to teach in the way they know works for them and their students, giving teachers more freedom over how they choose to teach. (Department for Education, 2013. Issue. Paragraph 2). The previously imposed NC levels and associated tests have been removed, giving schools and departments *more freedom to assess their students' performance against the NC* using their own assessment designs. (Department for Education, 2013. Actions. NC assessment. Point 4). There is an emphasis on *returning independence and autonomy to schools and teachers* in the State sector (Gove, 2013. Paragraph 34), and a lauding of the *freedoms of independent schools* and the new academy schools. (Gove, 2013. Paragraph 39). The virtues of a *rigorous and demanding academic curriculum with high expectations* of students is extolled (Gove, 2013. Paragraph 74; Department for Education, 2015a & b) placing *emphasis on a knowledge rich curriculum* providing a *sound basis for not only further academic study at university, but also employment*. (Gove, 2013. Paragraph 76; Department for Education, 2015a). A rigorous education and the *importance of core academic subjects* is valued in the ideology underpinning the new NC, with *subject specificity returning to prominence* once again in the sciences. (Gove, 2013. Paragraph 83).

> That means physics, chemistry and biology not play-based learning, project work and an anti-knowledge ideology. (Gove, 2013. Paragraph 77).

There is also a recognition that the *qualifications that the NC courses lead to should be "proper and rigorous", and valued by employers and academics*. (Gove, 2013. Paragraph 80). *Universities have made a more significant input into the reform of A levels and their curriculum content*, with *assessment returning to mainly examinations* at the end of the entire course, and a disbanding of modular assessments for both GCSE and AS/A level. AS and A level have been decoupled so that AS no longer counts toward the A level award. (Government Publication, 2015; Department for Education, 2015a & b). In a sense we are witnessing a return to some of the more traditional values that used to characterise our education system:

> …giving every child the chance to enjoy a traditional academic education is the most powerful lever for greater social mobility… (Gove, 2013. Paragraph 85).

In the school in which this study was undertaken, there are those who have some empathy with this return shift in ideology at government level in the UK, and there are those who do not share this view of education, preferring to retain and implement the more "progressive" ideology of recent times. This differential on the continuum of ideological paradigm, I would suggest, is a source of tension in the school and contributes to the ideological struggle inherent in the process of educational change.

A timely illustration of this dispute in the participant school is the recent development and rolling out of the schools' Teaching & Learning (T & L) policy. I was coopted onto the working party for this initiative by my department, which began in October 2013 and was under the direction of a new member of staff, who to begin with assumed chairperson of the meetings and wrote up the minutes. It became very clear early on that a clash of educational ideologies was creating a tension in the meetings, and that the apparent intention of this initiative was to ensure that "sub-standard teaching" is not allowed to take place in the school. The immediate concern raised was the question of what do we regard as "substandard teaching" as opposed to "good practice", and who makes this decision? (It was also felt that the chair of the meetings should rotate, and that minutes should be taken by someone other than the chair, following a dispute over several of the meeting minutes). Very early on in the process, a red flag was raised over the possible intentions of a T & L policy that would seek to dictate and impose certain ideological teaching methodologies on staff by virtue of integration into the school policies, thereby eroding professional autonomy with respect to how teachers choose to teach. To support this concern, documentation was cited from the new NC reform process that clearly indicated UK government wished to return autonomy to teachers and schools, and wished to have policies that do not dictate how teachers should teach (previously discussed). The initial reaction was a request to produce and circulate these documents as evidence that they actually exist. The documents were duly produced with the relevant sections highlighted and distributed to members of the working party prior to the next meeting. The reaction to this, was a statement

that indicated the school had not yet decided whether or not it intends to follow the new NC, and that a general election in the UK would become due in the not too distant future, and the school would await the result of that election!

Clearly this reaction, I would suggest, can be interpreted as indicative of a paradigm of thought that does not have complete empathy with current UK ideology on education reform. But of relevance to this study, illustrates how differences in ideology are a source of tension in the school. In the meantime, a T & L policy has been rolled out (Appendix 2), and includes a protocol of cyclic observations on staff by SLT. This protocol (Appendix 3) effectively defines what the school (but not necessarily the majority of staff, as there has been no proper mechanism by which staff have been able to review and comment upon the policy content) now considers to be “good practice” and therefore effectively dictates how teachers should teach. Objections were raised during the first and second round of observations, addressing issues of observer subjectivity and recent research (Coe, 2014; Mihaly et al., 2013; Strong et al., 2011) highlighting the fact that observations of teaching are highly subjective, influenced by the observers own paradigm of ideological thought, thereby making this practice questionable in terms of its validity and reliability, and therefore usefulness. These concerns (and the research) were ignored by SLT other than to state that observation of teaching is normal practice in the UK. The observations seem to be part of a strategy to secure accreditation by BSO (previously mentioned), but perhaps more disturbingly this subjective and unreliable practice could potentially be a further source of conflict and tension in the school, by virtue of its attempt to dictate how teachers should (or are expected) to teach.

Regarding the consistency of the new NC ideology with regard to education being a service to economic activity, and a policy lever for facilitating effective economic competition in the global market place, the Wolf report on a review of vocational education (Wolf, 2011) suggests that there remains a recognition that academic university education has its role to play. However there seems to be a shift in emphasis back to a more realistic valuing of the practical and technical skills that the vast majority of individuals should be able to master, and that it is a more practical hands on vocational education that will make the real difference in our economies ability to compete. There is a hint of a suggestion that in the

1960s era perhaps education had got it right, with only relatively few individuals expected to pursue an academic university education, and far more people involved in technical on the job training such as the apprenticeship schemes of the past, and other educational opportunities such as the old Higher National Certificate. However it is recognised that the economy is no longer a 1960s economy, and UK society is no longer a 1960s society. As the Minister of State for Further Education, Skills and Lifelong Learning, Mr. John Hayes MP has said in his Foreword to the Wolf Report, and also from the Executive Summary:

> While there have been many calls over the years for greater parity of esteem between academic and vocational qualifications, in practice this has meant making what is practical more academic, to the detriment of both. It is time, as the Secretary of State has said, that we recognise the 'inherent value of craftsmanship' – the intrinsic richness of manual work, practical and technical competencies. Recognising the value of practical skills matters for individuals and our society, and it matters for our economy too. Our future prosperity depends on building an advanced economy founded on high-level technical skills … It is always tempting to look back at a golden age; but trying to recreate 1960s education is not the answer. It was a different world and, above all, a different economy and labour market. (Wolf, 2011 pp6 & 9).

4.1 Summary.

A brief history of the instigation of the disapplied NC has been discussed together with its principle aims and purposes, and underpinning value statements, reflecting on how the curriculum was intended to reflect the characteristics and values of society and address the moral, social, spiritual, and cultural heritage of Britain. The notion of the NC establishing a foundation for lifelong learning, and the expectation that teachers must adapt their pedagogy to meet the needs of children in the context of social, cultural, and economic change has been touched upon. The precept that it is appropriate to export the disapplied NC from its British context into an entirely different cultural context such as the Middle East has been questioned on the basis of significant differences in cultural heritage, value systems, social & economic change and context. Further reference has been made to the notion of a cultural dissonance between the suggested Anglo individualistic value systems of Western nations in contrast to the suggested Arabic collectivist value systems of the Middle East, and the impact of these values on learning preferences. The notion that

contemporary progressive Western ideas about teaching and learning pedagogy are universalistic in their application has been challenged. This dynamic has been suggested to harbor an inherent tension where the embedded value systems of the disapplied NC are expected to be embraced by Arab society without due consideration being given to the differences in cultural expectations and learning preferences.

The pivotal role of the former QCA in the development and monitoring of the disapplied NC has been discussed with reference to the political ideology that underpinned this organisation and how it understood its role in education. From this discussion it emerged that the former QCA had a significantly dominant influence on education in schools, including curriculum, examinations and pedagogy. It has also been demonstrated that the former QCA was explicitly associated with the notion of knowledge based economy development and its inherent neoliberal political ideology. From this premise it has been argued that the disapplied NC can be thought of as a neoliberal political intervention in the education system.

The specific aspect of the disapplied NC of HSW in the science curriculum, which forms the specific focus of this research study, has been introduced together with the ideology of overarching and transferrable skills of the HSW integral component, suggesting how this ideology represents a significant departure from the traditional perspective on teaching science in schools. It has been suggested that implementation of the HSW component of the disapplied NC has contributed to a sense of tension in the education process, and further research evidence for this contention has been considered, along with my own observations as a practicing science educator in the Arabic cultural context.

Some criticism of the disapplied NC has been considered together with the NC review process, and the suggested shift in ideological paradigm that now underpins the new and current NC development, and the process of teaching and learning. The discussion draws attention to emergent characteristics suggestive of a swing in paradigm toward more traditional values in the curriculum and approaches to teaching and learning, and a perhaps more realistic expectation of the role of education as a service to economic activity.

The differences in ideological standpoint that are inherent in education have been highlighted as a suggested further source of tension in the participant school in this research study.

Before moving on to the research aspect of this work, it is useful to draw together the salient points of the discussion and argument presented in the preceding chapters that form the foundation of this study and how they relate to the research.

Chapter 1 considered the political ideological influences on educational reform of some of the foremost governmental institutions in the context of knowledge economy development. The discussion reasoned that education is susceptible to being reconfigured as a service to economic activity through neoliberal political influence. The notion of corporate value systems intruding on the education process was considered, together with the idea that this influence presented an emerging threat to educational autonomy, integrity and the preservation of academic standards. The political identification of education as a major tool for policy leverage, and the consequential coercion of school and college management teams to embrace neoliberal thinking has been suggested to place constraints on what is valued as knowledge, and this is suggested to be a further source of tension, especially where politically influenced Western notions of teaching and learning are imposed upon students in a radically different cultural context.

Chapter 2 sought to understand the thinking and ideology that underpins the policies of the Kuwait Economic Development Plan (KDP). Emerging from this discussion is the suggestion that the underpinning policies of the KDP share common ground with neoliberal ideology and have been influenced by Western intervention. Specifically the discussion discloses how the Kuwait government has identified education as a policy lever in its strategy for economic reform, and thus education reform in Kuwait becomes subject to neoliberal influence and its suggested inherent tensions.

Chapter 3 explores further evidence for this suggested tension in the Middle Eastern collective cultural context emanating from Western neoliberal interventions. The discussion suggests there is substantial evidence for the

existence of a collective cultural identity that is at risk under the influence of an increasing Western cultural presence in the Middle East, and specifically draws attention to the Kuwait context. This cultural dissonance is suggested to be largely responsible for the emergence of a perceived need to preserve and strengthen the Islamic identity and Arabic traditions, and a consequential impact on Arab attitudes toward contemporary issues of societal change, including education. Significantly attention has been drawn to evidence in the scholarly literature that identifies important differences in the value systems of Arab and Western cultures, which impact on learning style preferences, suggesting there is a strong socio-cultural influence acting on the learning process. This has been demonstrated to translate into a preference for a more teacher centered learning experience, characterised by greater formality and rigidity commensurate with a more traditional approach to teaching and learning in the Arab cultural context. As such it is suggested that students who are immersed in a collectivist culture such as the Middle East tend to experience a sense of tension when exposed to the demands of contemporary Western teaching and learning methodology, where there is a lack of acknowledgement and in depth consideration for the differences in cultural sensitivities and expectations in the learning process by Western practitioners who remain immersed in their own cultural and ideological comfort zone. The consequence of this is a scenario of well-meaning curriculum interventions that are ultimately less relevant and effective than they are intended or thought to be.

The evidence for a suggested tension then, seems to emerge from several perspectives.

1. An inherent tension where the embedded value systems of the disapplied NC are expected to be embraced by Arab society without due consideration being given to the differences in cultural expectations and learning preferences.
2. The suggestion that implementation of the HSW component of the disapplied NC has contributed to a sense of tension in the education process, and further research evidence for this contention has been considered.

3. The differences in ideological standpoint that are inherent in education have been highlighted as a suggested further source of tension in the participant school in this research study.
4. The political identification of education as a major tool for policy leverage, and the consequential coercion of school and college management teams to embrace neoliberal thinking has been suggested to place constraints on what is valued as knowledge, and this is suggested to be a further source of tension, especially where politically influenced Western notions of teaching and learning are imposed upon students in a radically different cultural context.
5. The discussion discloses how the Kuwait government has identified education as a policy lever in its strategy for economic reform, and thus education reform in Kuwait becomes subject to neoliberal influence and its suggested inherent tensions.
6. The suggested cultural dissonance between contemporary Western society and Arab society is suggested to be largely responsible for the emergence of a perceived need to preserve and strengthen the Islamic identity and Arabic traditions, and a consequential impact on Arab attitudes toward contemporary issues of societal change, including education.
7. The suggested preference for a more teacher centered learning experience, characterised by greater formality and rigidity commensurate with a more traditional approach to teaching and learning in the Arab cultural context. As such it is suggested that students who are immersed in a collectivist culture such as the Middle East tend to experience a sense of tension when exposed to the demands of contemporary Western teaching and learning methodology.

It follows that if a tension is thought to exist in the context of Kuwait's economic transition, which implicates educational reform, it can only be of benefit to educational practitioners and politicians alike if we have a greater understanding of the nature of this suggested tension and how it is experienced, because a sense of tension in the education process can reasonably be assumed to have possible detrimental effects on the outcome of educational reform and ultimately

economic reform. If we understand more about this issue we are better placed to make more informed decisions about what constitute appropriate educational interventions in the Kuwait cultural context. At the participant school level, this study is envisaged to provide a scholarly platform and relevant research base for additional understanding that might contribute to a more culturally relevant and informed teaching and learning policy development.

CHAPTER FIVE.

METHODOLOGY AND METHOD

5.1 Introduction to the Methodology.

Given the suggested evidence for the existence of a tension being inherent in the implementation of HSW in the curriculum within the Arabic cultural context, and the relevance and significance of this tension in the Kuwait context in terms of the country's proposed economic transition, the question emerges as to what is the most appropriate way of investigating this issue. A phenomenon such as "tension" is intangible in quality and yet very real to the individuals who experience it, and of course significant in its potential to have an impact in the environment in which it becomes manifest. Since "tension" impacts on processes through people, it becomes apparent that an appropriate research focus would be to investigate the lived experience of this tension by people immersed in the context of curriculum and pedagogical change within the economic transition setting.

The selection and adoption of a suitable methodology and method to explore this lived experience of tension is inextricably linked to ontological positioning – how we perceive the social reality in which we are immersed, and epistemological positioning – our perception of the nature of knowledge. The epistemological foundation for quantitative research, for example the elucidation of the molecular structure of DNA, places emphasis on objectivity and replication in the testing of hypotheses and attempts to make statistically significant generalisations about an assumed reality that exists independently of the observer. In other words, there is a physical reality that is capable of being discovered, described, and through observation of that physical reality, one can begin to predict with a degree of confidence that realities' behaviour under specific conditions. The lived experiences of people is a phenomenon that does not really lend itself to this positivist paradigm of investigation because the epistemological arena in this case is not tangible and real in the sense that it is there to be discovered and described. Carr (2007) & May (2001) discuss the ontological perspective here as

being an Interpretivist one in that social reality is not only complex but exists only as an attribute of the collective experience of many individuals. There is an acknowledgement that the social experience consists of multiple realities that do not exist independently of those who are immersed in the experience. Although this social experience is not a tangible entity to be discovered as such, it is significant because of its potential impact on the functioning of an institution such as a school. Let's take the epistemological perspective then, that in the case of the phenomenon of tension and the lived experiences of that tension by individuals who are immersed in the context of curriculum and pedagogical change, as not being an entity that already exists independently of the observer waiting to be discovered. Also let's take the ontological perspective of a complex and varied social reality that is actually created by the individuals in the process of their lived experiences through interaction with the tangible influences in their lives. Through these two perspectives it becomes apparent that some form of qualitative research study would be most appropriate in seeking to understand such a dynamic.

Qualitative research embraces a range of methodologies which share a common philosophical basis with respect to ontological and epistemological perspective. Social reality is considered to be constructed subjectively by those individuals who are immersed in the experience, and bound by context. The epistemological perspective acknowledges that knowledge construction takes place through a process of interaction between the knower and the known, rather than the seeker of knowledge finding it because it is already there to be found. It is recognised that the researcher from this perspective brings to the research process their own value systems and biases which will inevitably have an influence on the phenomenon that is the focus of the research, and so the researcher adopts a reflexive stance in seeking to understand and interpret the phenomenon. This philosophical premise facilitates the recognition and acknowledgement of the importance of complexity where the focus of the research involves human experience, and allows the acceptance of a research process that is collaborative between the researcher and the participants. The researcher in a sense becomes the learner, and the participants are seen as a

valuable consultant in that their lived experiences are valued and have a story to tell. (Wilding & Whitford, 2005).

5.2 Philosophical and Conceptual Foundations of Phenomenology.

Phenomenological methodology has been advocated by Streubert & Carpenter (1995) in Wilding & Whitford (2005) as a suitable research approach where a phenomenon requires greater in-depth description. The methodology has been discussed at length by many authors (Bevan, 2014; Edwards, 2012; Edvin et al., 2007 & 2008; Chenail, 2011; Frank & Polkinghorne, 2010; Ginsberg et al., 2013; Kinsella et al., 2008; Schulz & Rubel, 2011; Ostergaard et al., 2008; Rubin & Rubin, 2005; Wilding & Whitford, 2005; Richardson, 1999) and there is a general consensus among those familiar with phenomenology that it is a suitable approach to use where one wishes to understand the nature of a phenomenon that focuses on peoples' lived experiences. The methodology originates from the thinking of the philosophers Edmund Husserl and Martin Heidegger. (Dreyfus, 1990; Spiegelberg, 1994 cited in Wilding & Whitford, 2005). Heidegger developed the thinking of Husserl further, and Heideggerian phenomenology is a methodology that lends itself to seeking greater understanding of the experience of human existence. Heidegger and Husserl shared the understanding of the importance of "epoch", a process by which the researcher detaches himself from the ordinariness of interpretation of meaning attributed to the participant's description of lived experience, in order to allow a more objective understanding of the phenomenon to emerge. However an important development of this was Heidegger's understanding that this process of detachment can never be complete because one's subjective experience of the world will always colour to some extent one's interpretation of other peoples lived experience. Therefore in Heideggerian phenomenology the researcher acknowledges his limit of understanding, i.e. his own particular ontological and epistemological perspective on the phenomenon and its context. This is why the hermeneutic cycle of critical appraisal is important, allowing a deeper appreciation of the phenomenon to emerge during the analysis of the data. Heidegger was interested in the concept "Being" and the experience of "Being in the world", and how people derived meaning in their lives (Heidegger, 1962 cited in Wilding & Whitford, 2005), holding the opinion that these concepts of "Being", the existence

of the world, and the actual sense of being in that world are experiences that are interlocked with each other. It is the sense of "Being" that becomes the focus of attention or phenomenon in the study of the lived experience of tension, and because of the interdependent nature of the dynamic the phenomenon must be allowed to emerge through a passive reflexive process. In order to facilitate this process, Crotty cited in Wilding & Whitford (2005) advocate the need for the researcher to become detached from "everyday meaning" and to view "ordinariness" from a critical stance in their interpretation of the meanings conveyed in participant rhetoric, thus making it vital that the researcher clarifies and acknowledges their own perspective on the understanding they bring to the phenomenon enquiry, because the value systems of the researcher will inevitably impinge upon their ability to adopt the required critical stance of interpretation of meaning. Phenomenology can therefore be considered to be a qualitative research methodology that by virtue of its philosophical foundation, makes it a suitable approach to be used in studying peoples' lived experiences where the phenomenon has attracted minimal attention, is intangible, and is little understood. I would suggest that maybe because of the intangible nature of the phenomenon of the lived experience of tension, it has apparently received very little attention in the cultural setting of this study. I therefore contend that phenomenology is an entirely appropriate methodology to use in this study, which seeks to understand the lived experience of the tension implicit in curriculum and pedagogical change within the context of Kuwait's economic transition.

5.3 The phenomenological method.

Since in phenomenology it is understood and acknowledged that participant descriptions of their lived experience hold value, the emergence of new insights into the phenomenon require techniques on the part of the researcher to ensure as far as possible a critical perspective on the meaning of the narrative. These techniques are collectively known as hermeneutics and incorporate ongoing, cyclic, and reflexive engagement with the narrative in order to elucidate different levels or horizons of meaning. The researcher will of course begin with their own horizon of interpretation, and from this historically, politically, and socially influenced perspective begin to make interpretations of meaning embedded

within the collected data. (Heidegger, 1962 cited in Wilding & Whitford, 2005). The method involves processes of interviewing participants; data transcription; engagement with and immersion in the data; maintaining a passive interpretive stance; and cyclic hermeneutic analysis in the process of facilitating the emergence of different perceptions of "Being". Salient to this method however is an understanding and acceptance that:

> Viewed from this hermeneutic perspective, interpretations need not be seen as 'right' or 'wrong', but rather as only interpretations or 'plausible insights'… In other words, there is no such thing as an omniscient perspective, only a personal one. Although all interpretations are potentially valid, the challenge is to ensure they are as reflexive and rigorous as possible. (Wilding & Whitford, 2005 p4).

This research is therefore considered to only provide a plausible insight into the phenomenon of the lived experience of tension. This insight cannot be considered to be either right or wrong, but through demonstrating an adherence to scholarly integrity, this insight can be considered to contribute to our knowledge of the phenomenon in conjunction with the literature in the field, which collectively provides a platform for informed curriculum and pedagogical development in the Arab cultural context.

5.4 Interviews protocol.

My study has adopted an amalgamation of approaches advocated by Rubin & Rubin (2005) and Bevan (2014). Rubin & Rubin advocate a semi- structured protocol consisting of a balance between main questions, probes, and follow up questions. The intention of the main questions was to ensure the research question was thoroughly addressed by planning them in advance. The conversation was kept carefully directed toward the research issue through the use of probes, which also served to give an indication of the required depth and clarification. This method seems to be congruent with general qualitative interview protocol. Bevan (2014) suggests a specifically phenomenological structure, which has been incorporated into the interview structure, where the Epoche or Phenomenological Reduction (attitude) of the interviewer is given greater emphasis during the interview rather than only at the data analysis stage, requiring acceptance of the natural attitude of the participant, active listening,

and reflexive critical dialogue with the self. It was felt that this approach would facilitate clarification of meaning in the narrative through confirmation with the participant, rather than relying solely on interviewer interpretation at the analysis stage. The overall interview structure took the form of two phases of interviews. The phase I interviews were structured into three main sections: Contextualisation (eliciting the life world of the participant in natural attitude) using descriptive or narrative context questions; apprehending the phenomenon, using descriptive and more structured questions; and clarification of the phenomenon through imaginative variation of the structure of questions. The interview protocol was developed using this approach, with main questions ready, supported by a stock of possible probes dependent on the conversation and participant responses during the interview. Some follow up questions were introduced during the interview, but mostly took place in the phase II follow up interviews, after review of the phase I transcripts. The phase I interview protocol was piloted with three participants to ensure questions were readily understood, and that sufficient depth, detail, and richness emerged in the corresponding narrative, and spoke to the research question. In order to address the main issues from the phase I data analysis summary, the student and staff comments within the emergent theme descriptors were condensed into the statements that form the basis of the phase II interview protocol.

These statements were used to invoke a reaction from the participant, with potential for a wide ranging response, and to precipitate a more focused discussion.

The principal objectives of the Phase II interview were:

- To have a less structured question protocol to give scope for a wider response.

- To make statements embedded in the overarching theme descriptors generated from the phase I data, which facilitated discussion and allowed for member checking seeing if participants recognised the issue and that it resonated across the cohort.

- To obtain more specific and explicit examples of where tension arose within the theme descriptors, and more in depth data relating to the descriptors.

- Where appropriate referred back to the subsidiary themes in the phase I data analysis spread sheet using phenomenological probing.

Appendix 5p includes a transcript extract to clarify the three elements of main questions, follow up questions and probes in the interview technique used in both phases.

5.5 Development of the interview questions protocol.

Based on Rubin & Rubin (2005), the questions are designed to elicit, detail, depth, vividness, nuance, and richness in the participant narrative. Detail is sought by eliciting more information to clarify a specific point, encouraging the participant to provide specific information in order to allow greater understanding of the issue. Depth is sought by encouraging a more thoughtful and deeper response. Anecdotes, examples, and descriptions of events are encouraged to incorporate a more vivid characteristic in the narrative, with extended rhetoric and elaboration of perspectives providing richness and nuance to the narrative as a whole. These characteristics are facilitated through a mix of pre-determined main questions, follow up questions, and probes. The main questions form the scaffold of the interview protocol, and ensure that the research problem is thoroughly investigated by exploring each broad topic area. The research problem is effectively translated into issues and terms that the participant is readily able to relate to with the aim of encouraging narrative relating to perceptions, experiences, and understandings. These questions begin with a relatively broad scope in nature, referred to by Rubin and Rubin (2005) as a “Tour”. The questions then narrow down to become more targeted, providing a “Minitour” on the issue. Finally more focused main questions address the phenomenon more directly. Throughout the interview, which becomes evident in the transcripts and the discussion of the findings in the next chapter, follow up questions are asked, guided by careful listening to comments the participants make that seem important to the research question. Probes are utilised throughout to maintain flow of narrative and provide clarification whilst

maintaining the focus. A stock of such probes was developed prior to the interviews and used as appropriate.

The scaffold of main questions for the phase I interviews is informed by the overarching HSW statements in the A-level biology specification. These statements appear in appendix (5f) and have been mapped to the syllabus learning outcomes, practical and investigative skills, and departmental teaching scheme of work and teaching. By focusing the questions around these HSW statements that relate to what students should be able to do by the end of the course, and the various skills they should develop during the course, the research problem relating to the suggested inherent tension in the teaching and learning pedagogy associated with HSW as an example of a contemporary Western notion of curriculum intervention, is addressed. The phase I interview protocol appears in appendix (5g). The phase II interview statements are informed by the emergent themes from the phase I transcripts analysis. These statements seek to provide a platform for further more focused in depth discussion to apprehend the phenomenon, again making use of more focused questions and probes during the interviews as appropriate. The phase II interview protocol appears in appendix (5h).

5.6 Interview process.

Participants were scheduled for interview in advance by mutual agreement. Interviews generally took place in the participants' daily work place within the department providing a familiar environment. In some instances a Skype interview was arranged where participants were not able to attend in school, for example during examination periods when students were on study leave. Interviews were audio recorded using the laptop application, facilitating gathering of data in digital format and adhering to security protocol.

5.7 Safety and welfare of the participants.

This study involved children under the age of eighteen and due care and attention was given to their safety and welfare. The University of Sheffield ethics application was made, and after due consideration ethics approval was granted for the study. A letter of approval is included in appendix (5a). The study abided

by the agreed protocol in the ethics application. In particular consideration was given to the potential impact of the principal researchers' position as an "insider researcher" and senior staff member (Griffiths, 2007; Hellawell, 2006; Hockey, 1993; Mercer, 2007; Merriam et al., 2001). It was considered that in this particular study the most salient consideration in this regard was the concern with respect to the power relation dynamic between the principal researcher as a Head of Department and the participants. It is possible that both staff and student participants may have felt a sense of coercion in the recruitment process. There might have been a sense of reticence for example, about declining to take part or deciding to withdraw at any stage in the research, for fear of some form of prejudice or negative impact from the principal researchers' subsequent treatment or attitude toward the participants. These issues could also have equally applied during the research process and impacted on what participants were willing or unwilling to disclose in their narrative. In an effort to address these important concerns the research protocol included the following measures:

1. The Head teacher maintained an oversight role to ensure that there was a clear separation of roles in relation to the participants in terms of the researcher role and the separate role of teacher and Head of Department.
2. The Deputy Head upper school was involved in the participant recruitment process. At the recruitment interview stage the researcher re-explained the purpose and protocol of the research study, but withdrew when potential participants had the opportunity to ask further questions, and to give or decline their consent. At this point there was re-emphasis by the Deputy Head of the points of ethical concern outlined above, and the institutions' carefulness in this respect.
3. Reassurance was given regarding these outlined ethical concerns in the Information Letter given to potential participants.

5.8 Sampling strategy.

Purposive sampling was employed that would facilitate addressing the research question with reference to the following criteria:

- Participants were immersed in the Kuwait Arabic cultural and social context.
- Participants were exposed to Western cultural influences with respect to teaching and learning in the participant school.
- Participants were students or teachers involved with the A-level GCE Biology course.

The sampling of participants included these criteria in order to effectively capture the phenomenon. It was felt that A-level students in the sixteen to eighteen age ranges would demonstrate sufficient maturity and cultural exposure to not compromise the study. The A-level specification includes HSW embedded into the curriculum. The school population includes students who are mainly of Middle Eastern ethnicity, with a relatively small number of Kuwaiti nationals, participating in a UK curriculum. Few solid guidelines are given for sample size in qualitative research, but Marshall & Rossman (1995) maintain numbers of between ten and fifteen should be adequate enough to obtain saturation of data in order to credibly identify themes and patterns. The initial number of participants in this study is thirteen including two teaching staff.

Participant details

Participant	Nationality	Years in Kuwait	Gender	Ethnicity	First Language
1 Student	Kuwaiti	17	Female	Arabic of Iranian origin	Arabic
2 Student	Syrian	17	Male	Arabic of Syrian origin	Arabic
3 Student	British	9	Female	Asian of Kashmir origin	English
5 Student	Kuwaiti	16	Male	Arabic of Kuwaiti origin	Arabic
6 Student	Kuwaiti	16	Male	Arabic of Kuwaiti origin	Arabic
7 Student	Egyptian	11	Male	Arabic of Egyptian origin	Arabic
8 Student	Egyptian	9	Male	Arabic of Egyptian origin	Arabic
9 Staff	British	10	Male	Caucasian of English origin	English
10 Student	Kuwaiti	12	Female	Caucasian of Irish origin	English
11 Student	Kuwaiti	17	Male	Arabic of Kuwaiti origin	Arabic
12 Student	Kuwaiti	16	Male	Arabic of Kuwaiti origin	Arabic
13 Staff	British	3	Male	Caucasian of English origin	English

All AS and A2 biology students attended the preliminary meeting (30 AS & 4 A2) – 34 + 2 staff.

First recruitment interview – 13 including 2 staff.

Interviews phase I – 12 including 2 staff.

Interviews phase II – 9 including 2 staff.

In the first instance potential participants were gathered informally in the biology department during timetabled A-level teaching time. At this time the nature, aims, and objectives of the research study were introduced using a PowerPoint presentation covering the main points appearing on the potential Participant Information Sheet distributed. This information sheet is presented in appendix (5b). Time was devoted to questions, and those individuals who expressed an initial interest in taking part in the study were asked to take the information sheet home and read it carefully. Students were additionally asked to show the information sheet to their parents and discuss this with them. After one week potential participants were asked if they were still interested in the study. Only those individuals who expressed further interest were then given the Letter of Invitation to participate and attend the first recruitment interview. A copy of this letter is presented in appendix (5c). Those potential participants who returned signed copies of the Letter of Invitation were then notified of a scheduled appointment to attend the first recruitment interview. Prior to this interview, scheduled potential participants were vetted through the Deputy Head upper school to ensure that to the best of our knowledge they were not currently in crisis at home or at school (stable at the time of research and not dealing with stressful situations such as divorce of parents, death in the family or involvement with the juvenile justice system, involved with the school disciplinary procedures) and had a support system in place including parents / guardians and peers.

The purpose of the first recruitment interview was to clarify the purpose, nature, and processes of the research; obtain participant and parental consent; explain confidentiality and methods of data storage and access; assign pseudonyms in place of real names; answer queries and establish a sense of rapport and trust. A copy of the parental and participant unsigned consent forms is presented in appendix (5d), together with copies of oaths of confidentiality signed by the principal researcher, Deputy Head, and independent peer reviewer presented in appendix (5e). A locking filing cabinet for hard copy interview transcripts was used, and a purposefully assigned laptop for storage of digital data including sound files, with access code activated was used.

5.9 Data analysis & findings.

The audio data files were transcribed to produce typed copies. Transcripts were read carefully several times and analysis made use of the constant comparative method in order to generate perceptual categories from the data, reflecting particular properties. An open colour coding system was applied reducing the data into visible themes expressing the nature of the phenomenon. Comments that seemed to speak to the research issue, i.e. indicated some form of tension, were coded into broad themes. The initial themes that emerged from the student data were broadly categorised as follows:

1. Cultural link & work attitude. (IT A)
2. Cultural link and sheltered community. Corruption. (IT B)
3. Cultural link and attitude to education. (IT C)
4. Cultural link and HSW. (IT D)

The initial themes that emerged from the staff data were broadly categorised as follows:

1. Reasons for being in Kuwait.
2. Reasons for being in teaching.
3. Frustrations of being in Kuwait.
4. Frustrations with the Edexcel biology course.
5. Ideology and school management issues.
6. Cultural issues relating to a perceived Arab mind set.

Each time a comment was made relating to these broad initial themes, the participant number and transcript page was recorded. The spread sheet for this preliminary categorisation of data appears in appendix (5j).

By using the frequency with which thematic comments occurred in the transcripts, i.e. the percentage of participants that made similar thematic comments, a list of comments emerged that resonated across the cohort. This more focused set of comments from teachers and students was amalgamated under revised thematic descriptors, and appears in appendix (5k). From this revised list emerged the four major overarching theme descriptors and sub themes in the summary spread sheet of the phase I data analysis in *Table 5.1* below, namely:

1. Exam performance driven.
2. Preference for information based learning.
3. Reaction to / perception of HSW.
4. Impact of religion.

A subjective judgment was made by the researcher to include in the final sub themes list only those comments that represent 40% and above of the participants. It was felt that this figure, even though it represents less than half of the cohort, is substantial and potentially significant given that the focus of the study is the experience of tension. It is within these descriptors that the experience of tension that resonates across the cohort seems to reside from the phase I analysis.

It was these emergent themes and sub themes in the phase I data that informed the phase II interview statements protocol, thereby facilitating more in depth discussion focused on the theme descriptors relating to the phenomenon of tension. The phase II preliminary analysis spreadsheet is presented in appendix (5m). The emergent themes and sub themes from the phase II interviews is presented in *Table 5.2* below:

MAJOR THEME	STUDENT ISSUES	% STUDENTS	SUB THEME	STAFF ISSUES	**% STAFF**
EXAM PERFORMANCE DRIVEN T1	Focus on need for subject & exam grades to go to university / profession. Parental pressure.	**90%**	**T1 ST1**		
	Concern with unnecessary information.	**40%**	**T1 ST2**	HSW compromising student achievement	**100%**
PREFERENCE FOR INFORMATION BASED LEARNING T2	Used to information based learning.	**40%**	**T2 ST1**	Students previously used to a more formal curriculum & methodology of teaching & learning.	**100%**
	Preference for fact rather than theory.	**70%**	**T2 ST2**		
	Inferred preference for "traditional" teaching.	**40%**			
	Learning factual information is easier.	**60%**			
	Cultural expectation of information based learning & teacher centered teaching.	**50%**	**T2 ST3**		

REACTION TO / PERCEPTION OF HSW	Not used to HSW approach.	**50%**	**T3 ST1**		
	Not comfortable with an aspect of HSW.	**60%**		Students not happy with HSW.	**100%**
				Students have difficulty with critical thinking.	**100%**
				Students have difficulty thinking "outside the box".	**100%**
	Compromised engagement with HSW & perceived vagueness & ambiguity of some examination questions.	**60%**	**T3 ST2**	Perceived vagueness & ambiguity in examination questions.	**100%**
				Compromised implementation of HSW in Kuwait context.	**100%**
				HSW vague, wooly, irrelevant to student perceived needs & aspirations.	**100%**
				Assumes students live in the UK creating association issues.	**100%**
				Lack of student engagement with HSW.	**100%**
IMPACT OF RELIGION	Significance of religion in the Kuwait social & cultural context.	**80%**	**T4 ST1**	Discomfort associated with the specification and teaching encroaching upon religious thinking.	**100%**
	Discomfort associated with thinking stimulated by the course that is perceived to contradict religious beliefs.	**60%**	**T4 ST2**		
	Difficulty engaging with ethical & moral discussion without religious convictions being involved.	**50%**	**T4 ST3**		

Table 5.1: Summary of Phase I data analysis with emergent themes & sub themes

5.9 Data analysis & findings

OVERARCHING THEME	PARTICIPANT ISSUES	NUMBER OF PARTICIPANTS	FOCUSSED	UNDERCURRENTS
EXAM PERFORMANCE DRIVEN	This is the main concern	89%	**PASSING THE EXAM & GETTING INTO COLLEGE. PARENTAL PRESSURE / EXPECTATION.**	Culturally influenced. Status. Set way of thinking. Unnecessary information impeding main objective. Indirect.
	Goal of getting into a specific university course or job imperative	67%		
	Parental expectation or pressure	44%		
	Element of discomfort with some parts of the course	44%		
PREFERENCE FOR INFORMATION BASED LEARNING	Used to learning factual information. Difficulty with new way of teaching	89%	**PARENTAL EXPECTATION & PARTICIPANT PAST EXPERIENCE OF TRADITIONAL TEACHER CENTERED, KNOWLEDGE BASED T & L.** **EDUCATION FOR UNDERSTANDING OF LIMITED IMPORTANCE.**	Unpredictable/narrow/different expectation of answer in exam. Feelings of discomfort with HSW. Language difficulty. Getting into college important. Cultural lack of work ethic.
	Parental expectations of traditional learning	100%		
	Desire to get the information	78%		
	Passing the exam as main concern	67%		
	Parental pressure on students & teachers	67%		
	Education for understanding of limited importance	44%		
REACTION TO / PERCEPTION OF HSW	Ambiguity / wording of questions in HSW	67%	**HSW IS CULTURALLY & ENVIRONMENTALLY BIASED CREATING A DISADVANTAGE FOR PARTICIPANTS.**	Compromised ability to succeed in exam. Cultural difficulty engaging with HSW. Competition rather than helping each other. Status issues. Feelings of frustration.
	Assumption of UK based environmentally & culturally	56%		
	Perception of disadvantage due to none UK exposure	56%		
	Parental / cultural influence on ability to engage with HSW	44%		
	Narrow cultural perception of education / HSW irrelevant	44%		
IMPACT OF RELIGION	Social & cultural pressure to	89%	**SOCIAL & CULTURAL PRESSURE TO**	Family unwilling to discuss feelings of tension / conflict.

	conform to a perspective		**CONFORM TO A SPECIFIC RELIGIOUS PERSPECTIVE PLACES CONSTRAINTS ON ABILITY TO ENGAGE WITH ASPECTS OF THE COURSE.** **FREE THINKING MAY CREATE CONFLICT.**	
	Compromised ability engage with social, moral & ethical issues	89%		
	Conflict between scientific evidence & religion	67%		
	Evolution in specification causing tension	67%		
	Religious perspective is only correct	44%		
	Education & free thinking leading people away from religion	44%		

Table 5.2: Summary of the phase II data analysis with emergent themes & sub themes

5.10 Peer reviewer phase II analysis.

In an effort to improve the validity of the findings, the phase II transcripts were subject to independent peer review by a colleague in the department. The main themes and sub themes emerging from this independent analysis are presented as given in appendix 5n. Constant comparative analysis of these themes and sub themes relative to the researcher analysis is presented in *Table 5.3* below together with the percentage level of variance and level of agreement between the researcher and peer reviewer analysis for each sub theme. This was achieved by identifying the number of participants who made comments that were considered to match the themes and sub themes identified in the phase II analysis by the principal researcher. A threshold of above 40% recognition by the reviewer of phase II sub themes was used, as in the phase II analysis. The difference between the percentage of participants relating to the main sub themes within each overall main theme in the principal researcher and reviewer analysis was calculated to give a positive or negative level of variance. Graphical representation of this variance is presented in *Table 5.4.* It was considered important to include this procedure in the protocol to facilitate a means of enabling the reader to make a quantitative judgment about the validity of the principal researcher's analysis of the phase II data set, with the assumption that with decreasing levels of variance there is a suggestion of increased validity, and with increasing levels of variance there is a suggestion of decreased validity.

5.10 Peer reviewer phase II analysis

Overarching themes recognised by researcher & peer reviewer	Participant issues recognised by researcher in phase II data	% Participants	Participant issues recognised by peer reviewer in phase II data (participant)	% Participants	Above 40% threshold recognition by reviewer	% Variance between researcher & reviewer
EXAM PERFORMANCE DRIVEN	This is the main concern	**89**	(1),(2),(3),(5),(8),(9),(10),(11),(13),	✓ **100**	**YES**	**+11**
	Goal of getting into a specific university course or job imperative	**67**	(2),(3),(9),(11),(13),	✓ **56**	**YES**	**-5**
	Parental expectation or pressure	**44**	(3),(9),(11),	**33**	**NO**	**-11**
	Element of discomfort with some parts of the course	**44**	(5),(9),	**22**	**NO**	**-22**
PREFERENCE FOR INFORMATION BASED LEARNING	Used to learning factual information. Difficulty with new way of teaching	**89**	(3),(5),(9),(10),(11),(13),	✓ **67**	**YES**	**-22**
	Parental expectations of traditional learning	**100**	(1),(2),(5),(9),(10),(11),(13),	✓ **78**	**YES**	**-22**
	Desire to get the information	**78**	(1),(5),	**22**	**NO**	**-56**
	Passing the exam as main concern	**67**	(1),(2),(3),(5),(8),(9),(10),(11),(13),	✓ **100**	**YES**	**+33**
	Parental pressure on students & teachers	**67**	(2),(3),(9),(10),(11),	✓ **56**	**YES**	**-11**
	Education for understanding of limited importance	**44**	(3),(5),(9),	**33**	**NO**	**-11**
REACTION TO / PERCEPTION OF HSW	Ambiguity / wording of questions in HSW	**67**	(1),(3),(5),(10),(13),	✓ **56**	**YES**	**-11**
	Assumption of UK based environmentally & culturally	**56**	(1),(3),(11),(13),	✓ **44**	**YES**	**-12**
	Perception of disadvantage due to none UK exposure	**56**	(1),(3),(10),(11),	✓ **44**	**YES**	**-12**
	Parental / cultural influence on ability to engage with HSW	**44**	(2),(9),(10),	**33**	**NO**	**-11**
	Narrow cultural perception of education / HSW irrelevant	**44**	(1), (2),	**22**	**NO**	**-22**
IMPACT OF RELIGION	Social & cultural pressure to	**89**	(1),(2),(3),(5),(9),(11),	✓ **67**	**YES**	**-21**

	conform to a perspective					
	Compromised ability engage with social, moral & ethical issues	**89**	(1),(2),(3),(5),(10),(11),	✓ **6 7**	**YES**	**-21**
	Conflict between scientific evidence & religion	**67**	(1),(2),(5),(8),	✓ **4 4**	**YES**	**-22**
	Evolution in specification causing tension	**67**	(5),(8),(9),(11),(13),	✓ **5 6**	**YES**	**-11**
	Religious perspective is only correct	**44**	(1),(**5**),(9),(10),	✓ **4 4**	**YES**	**0**
	Education & free thinking leading people away from religion	**44**	(2),(8),	**22**	**NO**	**-22**

Table 5.3: Percentage variance & level of agreement between researcher & independent reviewe

5.10 Peer reviewer phase II analysis

Theme	Sub Theme		%Variance
EXAM DRIVEN	Main concern	A	11
	University or profession	B	-5
	Parental expectation / pressure	C	-11
	Element of discomfort	D	-22
INFO BASED LEARNING	Used to fact / difficulty T & L	E	-22
	Parent traditional expectation	F	-22
	Desire to get information	G	-56
	Passing exam main concern	H	33
	Parental pressure	I	-11
	Understanding not important	J	-11
HSW ISSUES	Ambiguity / difficulty HSW Qs	K	-11
	UK based assumption	L	-12
	Disadvantaged if not in UK	M	-12
	Compromised HSW engagement	N	-11
	HSW irrelevant	O	-22
RELIGION ISSUES	Pressure to conform	P	-21
	Engagement S,E & M issues less	Q	-21
	Conflict science & religion	R	-22
	Evolution & tension	S	-11
	Religious view only correct	T	0
	Education negates religion	U	-22
	Mean % variance		**-13.4**

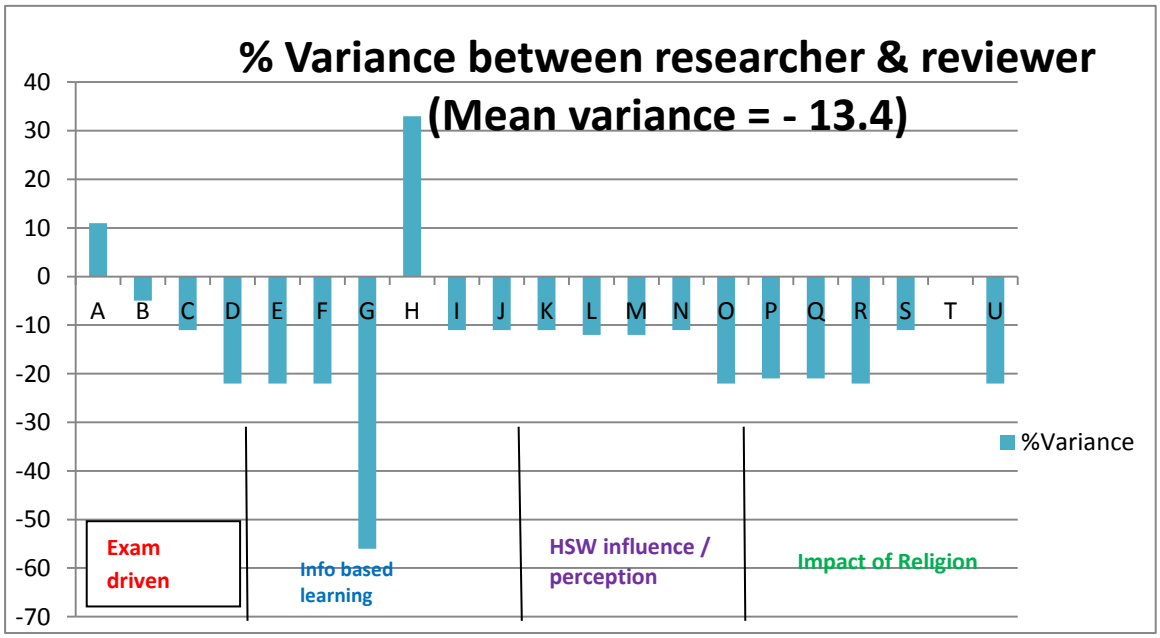

Table 5.4: Graphical representation of the percentage of variance between researcher & reviewer

CHAPTER SIX.

DISCUSSION OF THE PHASE I DATA ANALYSIS.

Firstly the major themes and subthemes emerging from the primary data analysis are discussed which informed the phase II interviews protocol, followed by a consideration of the main themes and subthemes emerging from the phase II interviews. This chapter deals with the phase I data, and the following chapter (chapter 7) addresses the final phase II data.

6.1 Advance organizer for the Primary data analysis

For the purpose of clarity the main themes & sub themes for the phase I data discussion are listed below:

6.2 Summary of the Phase I main themes and subthemes.

MAJOR THEME	STUDENT ISSUES (Sub themes)	STAFF ISSUES (Sub themes)
EXAM PERFORMANCE DRIVEN T1	Focus on need for subject & exam grades to go to university / profession. Parental pressure.	
	Concern with unnecessary information.	HSW compromising student achievement
PREFERENCE FOR INFORMATION BASED LEARNING T2	Used to information based learning.	Students previously used to a more formal curriculum & methodology of teaching & learning.
	Preference for fact rather than theory.	
	Inferred preference for "traditional" teaching.	
	Learning factual information is easier.	
	Cultural expectation of information based learning & teacher centered teaching.	

REACTION TO / PERCEPTION OF HSW T3	Not used to HSW approach.	
	Not comfortable with an aspect of HSW.	Students not happy with HSW.
		Students have difficulty with critical thinking.
		Students have difficulty thinking "outside the box".
	Compromised engagement with HSW & perceived vagueness & ambiguity of some examination questions.	Perceived vagueness & ambiguity in examination questions.
		Compromised implementation of HSW in Kuwait context.
		HSW vague, wooly, irrelevant to student perceived needs & aspirations.
		Assumes students live in the UK creating association issues.
		Lack of student engagement with HSW.
IMPACT OF RELIGION T4	Significance of religion in the Kuwait social & cultural context.	
	Discomfort associated with thinking stimulated by the course that is perceived to contradict religious beliefs.	Discomfort associated with the specification and teaching encroaching upon religious thinking.
	Difficulty engaging with ethical & moral discussion without religious convictions being involved.	

From the primary data analysis, the **first theme, exam performance driven learning**, is discussed from the two perspectives of student and teacher, in two parts. The focus on the perceived need for subject and examination grades, together with the perception of parental pressure to go to university is explored. In the second subtheme, the concern with a perception of unnecessary information in the course structure compromising examination performance is explored from the perspective of impeding the objectives of passing the examinations and going on to university. The **second theme, focuses on a preference for information based learning**, and is divided into three sub themes: students have been used to information based learning in their past experience of teaching and learning; an inferred preference for "traditional" teaching & learning; and a cultural expectation of a more formal curriculum of information based learning and teacher centered teaching. The **third theme, focuses on the reaction to and perception of HSW**, and is divided into two sub themes of: discomfort with HSW, and compromised engagement with HSW. The r**emaining theme focuses on the impact of religion**, and is discussed from the perspective of three sub themes: The significance of religion in the

Kuwait social and cultural context; discomfort emanating from thinking that has been facilitated by the course and is perceived to contradict established religious belief systems; and the difficulty of engaging with ethical & moral discussion without religious convictions being involved.

From the phase II data analysis, the extent of corroboration of the primary data analysis themes and sub themes are discussed together with more in depth exploration of examples of where tension is experienced within the theme and sub theme descriptors.

Primary data analysis discussion

6.3 Theme one: Exam performance driven learning.

The focus on subject specific examination grades in order to facilitate university entrance and entry to a profession, and the associated parental pressure: The cohort exhibits a relatively high profile career orientation associated with their learning objectives. A strong desire to enter medicine, dentistry, or engineering is evident:

> I think if you ask any Kuwaiti student in the school or any school, and you ask him or her what do you want to study at university, he will answer either medicine or engineering.12(Student).

Typical statements made by the participants include comments such as:

> I knew I wanted to do medicine and one of the requirements would be biology, … and it's also part of what I have to do for like pursue a career for becoming a doctor. 1(Student).

Consequential to this high profile career aspiration is recognition of the need to succeed in examinations with high grades. This prerequisite emerges as a fragment of tension amongst the cohort:

> Because at the end of the day those exams are what, what's going to take you to the next level, and the next level is university then on to err … profession. 6(Student).

The experience of tension created by this perceived need to achieve high grades relates to a recognition that students will have to sustain a momentum of intensive work ethic throughout their course of study:

> So I know that I have to study hard, not only here but in university too, because if I need to achieve … because I need to achieve the grades that I want to get into a specific university. 11(Student).

A further element of the emergent experience of tension lies in the parental expectation and resulting pressure to succeed academically:

> The pressure you know, of getting to university. You know, parents will put a lot of pressure on students to get those results, and … and I'm just … I don't just pass you know, the universities and what they want, they won't accept you until you get certain grades. 6(Student).

In order to meet such high parental and university expectations, students feel obliged or pressurized to work long hours at home after school:

> My Mum and Dad, like they always want me to do things. They just want me to stay for hours and hours, and study. 7(Student).

Compounding this experience of tension is the extraordinarily high requirements of Egyptian universities with respect to Egyptian nationals, who form a significantly high proportion of students in the participant school:

> In Egypt to go to a government university you need ninety nine percent or something! 8(Student).

Linked to this salient perceived need and expectation of the students to achieve highly in their examinations, there emerges an undercurrent of uncertainty with regard to the confidence in more "progressive" teaching styles that incorporate for example significant amounts of independent learning as distinct from more teacher directed learning, in terms of facilitating academic success in examinations:

> Because like I need to get an A for sure in order to get into a university and independent learning won't get an A. It might get a B or a C, but not an A. 7(Student).

There seems to be a significant preference within the cohort for a teaching & learning style that places the teacher as central to the process rather than a background facilitator of learning:

> … the teacher teaching. The teacher tries to make the facts easier, or helps make it easier, help you learn more, help you understand." 11(Student);

> But here, you give us the work and you teach it like you help us to understand it, and then we go home we are so clear about it and it's easy to learn. 7(Student).

These issues of career orientation, need to succeed, parental expectation, and lack of student confidence in 'progressive' T & L methods are echoed in the teacher comments. With regard to student career aspirations:

> It goes back to what parents expect and to have a narrow view point, they see … I mean what do their offspring do when they leave school? The parents say right, you either go into medicine, you either go into chemical engineering, you go into some form of engineering. They don't have any other view or any other idea as to what their offspring can go into … Like I say to my pupils at AS: "What do you want to do when you leave the course?" And they say: "My father wants me to go into medicine" 9(Staff).

Regarding the need for academic success:

> You've got a culture whereby the parents are very much driven by a grade, by a point in time at that moment, and they want that grade. And so, particularly in private schools, which all of the good schools in Kuwait are, are driven by - you must achieve a certain grade. 13(Staff).

Regarding parental expectation of students and the school:

> Yes. I mean, I think a lot of it's to do with unrealistic parental expectation. Err … they expect because their son or daughter has done well at IG, they expect it to be like it is at A-level, and when they actually do the course they see it's very , very different. The difference between what the parents expect and what the pupils can actually achieve is a world apart, err … and I think that's to do with the Arab mind set … they're very err … narrow in their approach to the curriculum. You do the slightest thing outside the curriculum and they say: "Sir, what are we doing this for?" 9(Staff).

This additional observation by teaching staff that the parental expectations may exceed the capabilities of the students is interesting as the combination of the dissonance between what is expected to be taught and how, and the parental requirement for high academic success is likely to intensify the sense of tension. A further staff comment corroborating this perception of parental pressure by students also draws out a recognition that there are students who either are unable to meet these expectations, or are not subject to such pressures:

> You have a group of children that are really pushing themselves, either they or their parents are pushing them and they wish to achieve something. And then you have the other side which is the sort of disenfranchised often Kuwaiti aspect which is they've been set a goal which is ten or eleven years of school and they feel that just attending is good enough. I think there is a group of Kuwaiti's from certain families that are very much driven to succeed and to progress, but there are others from other groups that for whatever reason do not push themselves to progress and are actually incapable. 13(Staff).

With regard to the lack of confidence in 'progressive' Teaching & Learning (T & L):

> I think the students perceive Western teaching as being a … didactic approach, you lecture them, teach them, they take a set of notes and they learn it. That is what they perceive they should be doing, and they've been brought up with that and have been for a long time. 13(Staff)

> … sometimes if it (T & L) goes counter to what they actually believe, they will just disregard that in their mind. It will go to one side, it's never really gona be re- assessed. 13(Staff).

This suggested teaching and learning preference resonates with other studies that have been previously discussed in chapter three. Wright and Bennett (2008) note that value systems embedded within a culture and society are significant variables in terms of their impact on learning style preferences. Hofstede (2001) suggests collectivist cultures have a preference for a more teacher centered learning environment characterised by a more formal approach, a teaching methodology facilitated by the culture itself and its social order which empowers the teacher to take authority and initiate the teaching and learning process. Al Harthi (2010) found that students of Arabic ethnicity showed a preference for significantly greater rigidity in the structure of teaching and learning and a preference for greater interaction with their teacher in comparison to the Anglo Western group. According to Bridger (2007) in a study which explored the lived experience of a cohort of Middle Eastern participants who were exposed to a Western curriculum that sought to develop active learning skills in the contemporary sense, contemporary Western style teaching and learning strategies severely challenged the participants past learning experiences, in that they were found to demonstrate the characteristics of passive learners as understood within the behaviourist learning tradition, i.e. learning by rote through an expectation of teacher lead learning.

Consideration of the second sub theme addresses an apparent *concern with a perception of unnecessary information in the course structure that is perceived to compromise examination performance.* There is a sense of uneasiness associated with the contemporary departure of certain aspects of the course from an emphasis on biological factual information:

> Normally or I think like err … like from like you know when we started science or biology it used to be just you know knowledge. 1(Student).

The requirement of aspects of the course to do more than just learn factual information seems to create a sense of loss or frustration because students are

no longer able to rely on their normal techniques of learning in order to prepare for the examination:

> There's no work in the issue, there's no learning there. You can't learn ethical issues and then answer it. 12(Student).

There is also a perception that the none factual aspects of the course are much more difficult to engage with and master, creating a further sense of discomfort:

> Being used to the theory is … easier because you just … you just have the facts, and you just need to learn them, but using the HSW, you have to think more about the details inside, you have to think in more detail. For the theory you have … you can learn the facts at home. But for the HSW you just keep asking more and more questions about what would happen, how it would happen. It would be more fun, but then you … you go too much into detail, too much detail. 11(Student).

What is interesting is the emergence of a nuance relating to a perception that the none factual aspects of the course are associated with encumbering the participant's main objective of passing the examination with a high grade:

> The HSW err … part doesn't have an actual answer … one correct answer. However the other … the facts, the biological facts have like a straight answer, the questions come in a straight way, and just have a straight answer, a concrete answer to write, OK. 7(Student).

> It (HSW) doesn't allow me to collect a lot of marks in the exam, cos it gets like … you get a six mark question and it's so hard to get the six marks, because the maximum you could get is four or five, so it's inhibiting me from getting to my objective. 7(Student).

This sense of tension resulting from a perception that the HSW aspects of the course are seen to be getting in the way of the participants main objective appears to create a scenario whereby students pigeon hole, if you like, the HSW rather than embrace it as it was intended, i.e. an integral part of their learning process:

> It's alright if you don't have to think outside the box when you're in school, but your main goal is just to pass the exams and get into university. 10(Student).

The general emergent notion that the HSW aspects of the course is perceived as contributing little to student academic success in this cultural context is corroborated by the observations made by staff participants. Firstly there is a sense of watering down of the factual biological material traditionally seen as the foundation to successful examination performance:

> Basically the academic content to the course is just not enough. Formal subject knowledge. The formal subject knowledge has been replaced by … well, it's been replaced by HSW, which is not formal, which is not subject based, it is … more emotional, it's more to do with feelings, how do you feel about things, err … ethical viewpoints. 9(Staff).

Staff have identified student difficulties with understanding and interpreting questions that require more than just factual based information recall:

> I think the Edexcel questions are very much sort of broader in their possible answering, and our students find that really difficult. I think the … the way that they are phrased and the terminology used is difficult for our students to be able to focus on what the key requirements are to answer a question. 13(Staff).

There is a perceived lack of relevance of HSW to the students in this cultural context:

> Because it doesn't associate well with their understanding of the environment around them, there's a lot of assumption that they are actually in the UK regarding certain understandings of the world, and that they've grown up in a Western world, and that's it! So I think you … you automatically are handicapping your students. 13(Staff).

> They've said: "Sir, why can't we ditch HSW"? One lad said he sees no relevance at all in HSW, to science, also in his everyday life, also to the course, and it seems to be a general comment that flows throughout the

> AS group, err … and they would definitely like to go back to a more formal curriculum. 9(Staff).

A sense of the students being culturally disadvantaged by the Edexcel course emerged strongly among the staff:

> So the assessment is actually partly based on are you a good British person or are you not. Err … instead of, here's an idea … tell us what you know about it, which is a problem with the course … Because it doesn't associate well with their understanding of the environment around them, there's a lot of assumption that they are actually in the UK regarding certain understandings of the world, and that they've grown up in a Western world, and that's it! So I think you … you automatically are handicapping your students. 13(Staff).

Finally there is a sense that these factors conspire to compromise the examination performance of the students:

> We discussed it in the department and we came up with one conclusion, that it is this theme that runs throughout the course of HSW that they just cannot get to grips with. And we definitely noticed when we analysed the results that they have gone down as a result. 9(Staff).

> If you are outside of the UK I think you're actually setting yourself up to fail, I think your students will lose ten percent of the marks straight away just by sitting it. 13(Staff).

6.4 Summary of theme one.

The essence of the lived experience of tension in the first sub theme seems to be grounded in a perceived conflict between teaching and learning expectations and preferences of the cohort and the ideological teaching and learning paradigm of certain aspects of the Edexcel course to which they have been exposed. The tension is deepened by the cohort's experience of a salient need to succeed academically, compounded by a sense of parental pressure to do so. The tension resides in the process of trying to reconcile the dominant need to

succeed with the contemporary teaching and learning style expectation placed on students by certain aspects of the course.

The essence of the lived experience of tension in the second sub theme seems to reside in the disparity between what the participants value in their education that will facilitate achieving their salient goal of high academic achievement and ultimate professional fulfillment, and the valuing of higher order thinking skills, together with T & L strategies embedded within the educational ideology of the HSW aspects of the biology course. Whilst many students seem to experience difficulty engaging with HSW, they do enjoy some of the HSW implementation, but they do not seem to value its contribution to their success. Furthermore there seems to be a sense of lacking in cultural relevance and an associated difficulty in accessing the examination questions. Together it is felt that these factors contribute to reduced academic success. Again this suggested finding seems to resonate with the work of Wright and Bennett (2008); Hofstede (2001); Al Harthi (2010); & Bridger (2007).

6.5 Theme two: Preference for information based learning.

Students have been used to information based learning in their past experience: The sway of a past experience of learning factual based information emerged in the data. Participants indicated clearly that they have been used to being given information and learning it:

> Well … that's the way that we study. The teacher explains it … tries his hardest to explain it and make it easy for the student, and then the student … the student studies it again, revises it for the exam. 11(Student).

One of the participants made an interesting observation, interesting because this participant is a British Muslim who spent a number of years exposed to the British NC in England, making reference to Arabic cultural preference in their learning:

> I have (laughing) a lot of Arab friends in the lesson, as I said before. The way they … the way they learn and the way they like to be learned … taught is that err … the majority of people here, they prefer looking, like

> basically being given notes and then going to tuition or something (laughing) and then just basically just learning, like memorizing. 3(Student).

A strand of tension emerged in this sub theme associated with the experience of difficulty in transition from a factual information based IGCSE course to the AS level course:

> But now I found many troubles. My … my old routine was like study and do some past papers and that's it. But now even if I do some past papers, I also have more problem because some questions I can't understand. Even … even with past papers, you can't … past papers can't help you with these type of questions. 12(Student).

From the staff perspectives, the tension within this sub theme relate to issues surrounding students on the one hand being used to being given all the information they require, and the difficulties this creates for the teacher in attempting to implement a more student centered approach:

> I suppose err … they haven't been used to critical thinking, to thinking on their own. They've been spoon fed … I suppose we all do it, I do it … you have to spoon feed to a certain extent because of the content of the course, particularly the more academic bit. But spoon feeding doesn't help them to stand on their own two feet sometimes with regards to this aspect (HSW), and that's where they find it difficult. 9(Student).

The second sub theme identifies *a preference for 'traditional' teaching and learning*, and encompasses a preference for factual knowledge as distinct from theoretical knowledge, together with a sense of factual information being easier to get to grips with. Emergent strands within this sub theme include a preference for the teacher giving the information and telling the students what to do, as distinct from the students working things out for themselves. The students look to the teacher as the guardian of knowledge who will teach and explain the facts:

> But you know, having a teacher who knows about his business, you know, and tells … and tells you how to do this and that, and you know, spends a

> lot of time in the lesson just explaining to you, I think that's … that's good. 6(Student).

> When we enter a lesson it's good for the teacher to teach the facts, because if the teacher doesn't teach the facts then we have nothing to talk about, nothing to answer. So it's best when the teacher teaches everything, then the teacher can ask us questions. 11(Student).

A second strand within the sub theme is a preference for being given the notes (the facts) necessary to be able to access the examination questions, so that students can then devote their time out of class to learning the information and practicing past paper questions:

> Most of them they teach the way that I like, the way that they give us the notes, and they teach it, then I go home and learn it, and that's the way that I like. And then they practice past papers during like the last month before the exams. So that's the best thing about (name of school). 7(Student).

An interesting notion, though not shared by the majority of students, is one that negates the value of student participation being necessary at all if all the facts are being "correctly" taught!:

> If the teacher is teaching correctly and the students understand then there's no need for student participation, if the students understand. 11(Student).

A third strand within the sub theme is the perception that factual information is easier for the students to engage with. On the one hand there emerges the feeling that HSW is an interesting aspect of the course but factual information is easier to absorb:

> I think err … like both (HSW & factual information) are quite interesting, you know both are quite interesting. Err … the facts are much easier to take in and understand since err … you have diagrams or you can picture it all in your head. 1(Student).

Whilst HSW is considered to be interesting, the students seem to be reticent about being tested on HSW aspects in the examination:

> Something can be interesting but it doesn't necessarily mean we want that to be … you wanna be tested. 10(Student).

An interesting perspective that emerges is one that considers factual information to be more fair as a basis for assessment internationally because this creates in a sense a more level playing field for students who are from different cultures:

> Questions to do with theory (facts) would be better because everyone around the world would be able to apply the same knowledge in the same way. 10(Student).

The fourth strand within the sub theme focuses on an evident preference for factual information as distinct from information that is uncertain or hypothetical. On the one hand there is the perspective that factual information provides a more sound basis for decision making:

> It … it is interesting and I think it's necessary to know this information, but then at the same time is it worth … I'd rather be told information that they're certain of instead of theories … Cos then I know that I'm basing my decisions on stuff that people have … are certain on, instead of theories. 2(Student).

An element of discomfort and uncertainty seems to be associated with engaging with hypothetical rather than factual information:

> Yeah I mean, not … not only biology but most subjects, everything you did is not sure now, it could be wrong, it could be right. You know … you're not sure about what you're doing … I think in my opinion it creates more problems. 12(Student).

> More … it confuses more. *So you don't feel comfortable with it?* No. 12(Student).

A further issue that seems to create confusion is when students are required to engage with differences of opinion amongst the scientific community:

> Well it's … it can be a big mix up, because you learn about something knowing that it's correct, but then when you move to A-level they tell you that this thing isn't correct, so. 11(Student).

A fascinating dimension that emerges in the data, and will be considered in more detail in the fourth major emergent theme, is the recognition amongst the students that religion and culture have an influence on developing a theoretical perspective:

> But the minute that's (differences of theoretical opinion) brought into the exam like … and I do believe you should be tested on more theory of what you know how the body works, as opposed to answering those type of questions, because again you have people with different religious backgrounds and different cultural backgrounds all influencing what's in the answer. 10(Student).

There is a feeling that to be expected to engage with differences of theoretical opinion at school level, and for the purposes of examination, is unnecessarily stressful:

> It's neither black or white. And it's quite hard, especially at this age as well, you're still perceiving what's morally and ethically appropriate, and that's gona change over the years. So being able to like, being asked at this point, particularly in an exam as well … it's … it is stressful. 10(Student).

Again for the teachers the tension in this sub theme resides around the issues of attempting to merge a formal academic teaching & learning expectation with the requirements of the HSW components of the course:

> Yes, I suppose it's a head on collision isn't it, between what they see as formal, academic learning, like it was in the UK, compared to a less structured err … more … I don't know, just a less structured curriculum back in the UK. And then they can't equate or they can't marry one to the other. 9(Staff).

There is if you like a tension in the requirement to compromise between the expectations of the students and parents, and the desire to implement a teaching & learning pedagogy that does not sit comfortably with these expectations:

> Yeah. And there's always a sort of balancing act that you end up sort of trying to do which is, what do I wanna … how do I wanna sort of teach and my beliefs in guiding how I should educate, how I'm supposed to educate according to the curriculum and the expectations and requirements of the parents and the students? 13(Staff).

The third sub theme explores the *expectation of a more formal curriculum of information based learning and teacher centered teaching*. Firstly reference is made to an assumption or belief that information based learning is how most students are able to learn in this cultural context, and that this type of learning is socially acceptable:

> So I think that's … this err … the way the course is taught, like probably in all of Kuwait is it's like adapted … it's like the way the children here learn and the way that it's socially acceptable, like the way the parents expect it to be. I don't think they, the parents don't really expect it like to be interacting and everything. They probably think that's for like primary kids. 3(Student).

There is some reference to a sense of rigidity or inflexibility regarding "new" ideas about teaching and learning, and a fixed way of thinking associated with holding on to the traditions of the past:

> More traditional … traditional meaning like, they're still kind of stuck in the past. They're not going … I am saying very generalizing, not all Arabs are like this, but I think the majority … like the way this country is run, it's like sticking to old beliefs, like old is gold type of thing, and err … that does really influence … they're not really open to like you know … the … the new course. 3(Student).

From the staff perspectives there emerges the view that attempting to move the students away from their pedagogical preference of teaching & learning could be

helpful, but there is a tension in trying to do this because of a perceived cultural pressure to remain traditional:

> Here you have one preconception of how to teach, while pushing the students away from that their education might improve, the cultural push is to push them back to it, the parents the kids the country in general wants to push them back to this way of teaching, or their perception of what good teaching is. 13(Staff).

Then there is the view that because of the relative wealth of the country there is a culture of not being used to doing things for themselves, which is perceived to create difficulties when placing expectations on students to think for themselves:

> If you're not used to thinking for yourself on a highly academic course, it's very difficult to start thinking for yourself if you haven't … if you're just not used to it. I mean let's face it, most Kuwaiti families have maids, and the maids do everything for the children. 9(Staff).

6.6 Summary of theme two.

The essence of the lived experience of tension in the first sub theme seems to centre around the discomfort associated with no longer being able to solely rely upon the learning of factual information to pass the examination. This discomfort seems to stem from a requirement to change from what the participants have been used to in their past learning experience. From the teachers perspective there seems to be a sense of tension associated with what the students are used to and what the teachers are trying to achieve educationally that requires a different approach.

In summary the essence of the lived experience of tension within the second sub theme seems to center around several dynamics. Firstly the conflict experienced between the participants perception of the teacher as the imparter of knowledge, and the requirement of the course to engage with independent learning. Secondly the participants experience a sense of anxiety in terms of feeling confident that they have all the information that they will need to be able to access the examination questions, since they are faced with an element of none factual structure in the course. Thirdly there is a sense that engaging with factual

information is easier than engaging with the requirements of HSW, and that the HSW components of the course present some difficulty. Fourthly the participants empathise with the notion that cultural and religious differences impact upon the none factual aspects of the course, giving rise to an element of uncertainty in their ability to engage fully with all aspects of the course. Fifthly there is a sense of apprehension regarding the requirement to engage with hypothetical as distinct to factual information and ideas, and also with the requirement to engage with differences of opinion in the scientific community. Sixthly there is a feeling that there is a degree of inappropriateness for the students to be expected to adequately engage with differences of opinion with respect to hypothetical knowledge at school level. Finally the teachers experience a sense of tension in the process of trying to merge the traditional preferences of the students with the HSW requirements of the course, and also in the process of compromising their wish to adopt a teaching & learning pedagogy that would blend more suitably with the educational objectives of the HSW aspects of the course.

The experience of tension in the third sub theme seems to be on the one hand associated with a disjunction between a cultural expectation of information based learning, and attempts to implement aspects of the course that require more student centered interaction. On the other hand there seems to be a sense of tension associated with clinging on to a cultural tradition of rote learning in the face of a vanguard of change that is attempting to implement more student interactive learning.

6.7 Theme three: The reaction to and perception of HSW.

Discomfort with HSW. Within this sub theme emerge two strands associated with student perception of feeling uncomfortable in some way with aspects of HSW. Firstly there is a sense of recognition by the students that they are not used to this approach in their teaching and learning experience. Secondly there is a sense of difficulty engaging with the HSW. With respect to the students feeling unused to the HSW approach in the curriculum there emerged a sense of dissatisfaction in the way HSW is approached by the teachers, which seems to be associated with the frustration teachers have expressed in trying to implement HSW:

> Like the way they teach, like I'm not used to it, the whole 'A' level course like AS and A2, it's just reading notes, we never really did anything interactive. We do have discussions sometimes, but not very much, so we don't really hear like people's ideas and questions. We don't question things much, so we don't really hear other points of views or … so that, that does kind of … that is quite … it's a lot of tension. 3(Student).

These type of comments seem to emphasise the tension that exists in the process of teachers attempting to implement HSW in a compromised fashion, against a backdrop of intelligent students who recognise on the one hand that they need to be able to engage successfully with aspects of HSW, but are feeling frustrated because they sense that the HSW teaching is not quite what it should be. There is a feeling prevalent among some students that they are not being properly taught certain aspects of the HSW requirements:

> And when I do like, past papers and look at some of the mark schemes, half of the stuff on the mark scheme I don't … I don't really know what it means because in school we just read, we just study the notes, we don't actually … we don't actually do like data analysis in school, we don't. We're not taught that, we're not taught how to interpret graphs, well I've not been taught it by my teachers. 3(Student)

> … so that is nerve wracking kind of in an exam. 3(Student).

A sense of unease is evident among the students associated with the fact that HSW is a new entity for them, tempered by a recognition that increased exposure to HSW creates greater familiarity:

> Which with err… with time I got used to it and it became a lot more easier than the beginning, because at the beginning it was something new to me. 8(Student).

A further element within this strand is an interesting reference to a possible cultural issue that is perceived as being associated with the discomfort surrounding engagement with HSW:

> Yeah, I think that it's cultural yeah. Even in some … most classes and most subjects I've been in last year and the year before, there wasn't much of all these things (HSW activities). 12(Student).

From the staff perspective regarding this sub theme of discomfort with HSW there emerges two strands of thought. Firstly a sense of dissatisfaction with the level of student enthusiasm to engage with HSW:

> Maybe it's due to laziness, they don't … they don't want to do it (engage with differences of opinion) or they can't be bothered. *In your experience do you feel that the students are able to adequately engage with this idea?* Not particularly, no. *Why is that?* Again, they don't see it as relevant. They see it as your job, you do it. 9(Staff).

There is a suggestion by staff that part of the reason for unsatisfactory levels of engagement with HSW is possibly due to students being unable to relate properly what they are learning to their real world, creating a sense of disjunction between their lived experience and their learning:

> If it's not a straight line or it's not something they saw five minutes earlier they find it really difficult. They actually … the analysis of data and relating that to a real world problem or a real situation I think they do find that quite difficult. 13(Staff).

> … understanding of how we can relate to things and understand fairness and all of this sort of thing. And that's not in this school, well this country in general. 13(Staff).

Of interest is a suggestion that this apparent lack of engagement with HSW might possibly be associated with language issues that are embedded within the cultural context, relating to a different descriptive emphasis:

> I think a lot of students in this school would generally get caught up on the periphery information, they can't identify the key point for discussion, instead they get caught up in all the other wording around it. Err … which sort of fits in with their language approach as well, cos the way they deal

> with language it's quite … it's quite flowery, it's quite expressive, and I think they read in the same way that they speak. 13(Staff).

> For them every word has importance so when they read a piece of English, explanation, question or whatever, they may be over emphasise certain aspects that a European wouldn't. 13(Staff).

The second strand seems to be associated with the difficulties students experience when attempting to engage with HSW. One element of this is the perception that the students have of themselves in terms of their ability to "think outside the box". In other words the ability to take account of several parameters when trying to solve a problem. They do not think they are very good at doing this generally, and yet they recognise a need to try and develop this ability:

> When you had to do like … like explaining a graph, or explaining trends. Yes … I suppose you have to think more in detail to what's … what's going on … it made me feel that I should start thinking much more out of the box, and err … you have to explain things that are not necessarily expected … Like don't think just about a certain situation, think about something that can be related to it that can affect that situation. Yes. 5(Student).

In particular this issue emerged strongly in respect of being able to adequately engage with ethical issues, differences of opinion, and discussion:

> I don't like the err … the part where we talked about ethical issues, you know, because ethical issues are mainly about … mainly about opinions you know, and sometimes you can't get them … get into the head of another person and know what they're thinking and … and what … where those ethical issues come from. 6(Student).

There is also a sense of anxiety related to these issues which harks back to the major concern that students have of being able to perform in the examination:

> When you get this … ethical issue, I think this is a big problem especially because we always like writing and writing and writing … and now, there's no writing in this one. You … you know you can learn the problems or the

> issues, even if you learn them you can't answer because every question will be different from the other. 12(Student).

One of the main concerns for the students with their engagement with ethical issues and discussion seems to center around the difficulty they experience in coming to terms with the fact that there may not be a cut and dry correct answer, which seems to conflict with their expectation and previous experience:

> There are things that conflict with each other. So sometimes they say err … that stem cells can be used already, and sometimes they say it's not legal, or can't be legally used now because it might cause a cancer later. So … it's hard to understand what they need (for the exam). 7(Student).

The HSW aspects of developing the ability to critically analyse and review experimental procedures also seems to be a source of tension, again from the student perspective of being able to answer examination questions. The students here are again preoccupied with what should be the right answer, rather than coming to terms with the fact that there can be different answers that all have some merit, and that the main point is being able to justify your point of view:

> Sometimes you don't know … sometimes there is no wrong or right answer, because sometimes you get results and you don't know … that might be right, that might be wrong … And sometimes when we're exposed to that err … you know we might have … we have the results but we don't know what the correct answer is … it just sometimes a little bit confusing knowing which one is the right answer, which one do you go for. 6(Student).

Once again the specter of feeling not being fully prepared for the examination is a source of tension for many students when they are engaging with the HSW aspects of the course, because they see this aspect as being in a sense intangible, it is not factual and therefor for them seems to be out of their grasp and control:

> You're not gona fully be prepared no matter how many practice, how many times you practice that question at home. It just depends on that

> question on that day, and you don't … you can't just fall back on your own theory that you've learned in a text book … If you approach it at the wrong angle and tackle it differently, then you won't get the marks. 10(Student).

For the teachers the main area of concern in this strand of difficulty with aspects of HSW is trying to get the students to think critically about what they are engaging with in the course. This issue encompasses several elements of tension. Firstly the notion of "thinking outside the box":

> A lot of them keep saying: "Sir, what is this question actually asking"? It's not name this, describe this, analyse that, it's basically bringing more emotional subjects into the course. Now in science it seems to me emotion has no place and they find questions like this difficult to do. Err … I suppose it involves thinking outside the box, err … that's the main thing I find with my pupils anyway … sometimes I feel it's me doing all the work. 9(Staff).

Secondly there is an element of apprehension among the teachers when it comes to engaging critically with certain aspects of the course that are culturally and politically sensitive in this part of the world. For example discussing certain moral, ethical or religious issues. In fact the religious and moral aspects of engaging with certain parts of the course emerged as a major theme, and will be discussed in the final section of theme four:

> As a teacher you have to be very careful to stay away from religious viewpoints, and once or twice I could see the ground opening up in front of me, when one of my pupils brought it up and I had to stamp it out pretty quick. If religion comes into it, that's a sticky issue. 9(Staff).

The second sub theme: *Compromised engagement with HSW and vagueness & ambiguity in Qs*. Again several strands emerge in the student lived experience. Firstly there is a tension in the perception that the HSW questions do not have a set way of answering, giving rise to a sense of uncertainty which seems to be rooted in the past experience that students have with rote learning of factual information, and again in their pre-occupation with examination preparation:

> It's because anything unknown … not unknown … unfamiliar, makes you feel nervous and it is unfamiliar even though I've practiced loads of past paper questions and they're always there, there's still that thing where … if we don't have notes on this, so we don't … there's not actually a set way to answer this, and sometimes they trick you … I've not actually studied this for the exam, so I'm just … so it does make it slightly go with the flow kind of … you're just on the spot, just .. so that is nerve wracking kind of in an exam. 3(Student).

Because HSW is not looking specifically for factual recall, but more of an understanding of how to apply basic principles, students experience a sense of apprehension in their ability to engage with HSW effectively. But their perception of how they should be trying to develop their engagement capability seems always to be dominated by the salient perceived need to perform in the examination. There is also for some students a recognition that their engagement with HSW aspects of the course in class is inadequate:

> The HSW err … part doesn't have an actual answer … one correct answer. However the other … the facts, the biological facts have like a straight answer, the questions come in a straight way, and just have a straight answer, a concrete answer to write, OK … But the HSW part, it's always a debate … so … it might cause some conflict at the end … Because different people have different opinions, so you're not always correct. 7(Student).

> You can't learn it, you have to apply all the knowledge you know and like … and basically condense it, like using your own experience and knowledge and write it down in the exam paper, and I don't think you can … you can't just learn notes and do that. You have to, like you have to have discussion in your class, you have to hear different ideas and … *Right. So is that creating some kind of tension for you?* Well … in the exam it is because I've like … I'm … I'm not really used to that now. 3(Student).

This requirement to be able to apply information rather than simply regurgitate it seems to create a conflict for the students when answering HSW questions,

since they are often unsure of what tack to take in the development of their answers. There is a sense of uncertainty as to exactly what the examiners might be looking for, which with factual recall does not arise to the same extent. In this respect the students perceive an element of vagueness in the questions:

> What I don't like is the exam questions. But no, it's because I learn it, a lot of detail, I learn it and I can understand and be able to teach someone that, but the minute … the Edexcel questions in specific are quite hard to approach which angle to take. Sometimes the questions are very vague, so you take a wrong tangent, don't get the marks and you don't get the grade which you think you deserve … it's either one angle they want you to take, and if you don't take that angle you kind of lose the marks that you need, that you knew the answer to … Sometimes it's the way it's worded … And you just take a completely different tangent.10(Student).

> But I think it is just the problem in the way they are asking you, I don't think it's specific enough.10(Student).

Together these issues conspire to exacerbate the sense of tension the students experience because they feel that no matter how well they think they have studied in terms of their conception as to what good studying entails, which in their experience has been learning factual information, they can never be fully prepared for the examination:

> You're not gona fully be prepared no matter how many practice, how many times you practice that question at home. It just depends on that question on that day, and you don't … you can't just fall back on your own theory that you've learned in a text book … If you approach it at the wrong angle and tackle it differently, then you won't get the marks. 10(Student).

The perceptions of the teachers with respect to this sub theme again encompass several strands. Firstly there is a corroboration of the student insight and apprehension that some of the HSW questions might be vague or inexplicit creating difficulty with interpreting exactly what the question is after:

> I think the Edexcel questions are very much sort of broader in their possible answering, and our students find that really difficult. I think the …

> the way that they are phrased and the terminology used is difficult for our students to be able to focus on what the key requirements are to answer a question. 13(Staff).

Secondly the teachers expressed a sense of compromised implementation of HSW partly due to the shorter academic year in Kuwait in comparison with the UK (which runs from early September to mid-June, with AS students effectively going on study leave shortly after Easter). This places greater pressure on the staff to complete the syllabus, and as such they are less inclined to engage fully with the HSW aspects of the course such as discussion and debate:

> Firstly we have short teaching periods, we have small amounts of time to teach the subject, and so, particularly in biology, there is a lot of material to get through … Which means you then start to look at, well what can I cut, what can I reduce, what can I leave for the students to work on? And as a teacher, you know, the thing that you are probably best at is trying to pass on the idea, the understanding of a field. 13(Staff).

An interesting impression that emerged is a sense of some staff being fully acquainted with HSW and "on board" with implementing it and what it is trying to do, and others being unsure of HSW and not particularly in favour of it, seeing it more as a hindrance than a positive development:

> The other thing is this idea of How Science Works. Now this is a theme that occurs throughout the biology course but even as a teacher I am not particularly sure what it entails. It seems to me to be very wooly, it seems to be doing things outside of the curriculum to make it more interesting … I think it's irrelevant to what they are studying at A-level. 9(Staff).

In contrast the other participant teacher portrayed a very different point of view which seems to empathise with the ideology underpinning HSW:

> A-level … generally I like lessons where we start off with a concept, an idea, and the students actually sort of bring to the table their view of it, their ideas of it, and we sort of explore that. Err … then we normally refer to what the course itself requires they know, what they know of that, what other information might go round the outside of it. Err … and then see

> how that links in to what we've done in the past. I tend to find that a student centered sort of lesson for the A2 is quite good. 13(Staff).

This dichotomy of vision about the teaching process contributes to a sense of tension in the department (and in the school) and resonates with the work of Toplis, R. & Golabek, C. (2011) who suggest that it is new entrants into the teaching profession that are most likely to embrace the changes in thinking and ideology that underpinned HSW (Braund & Campbell, 2010 in Toplis, R. & Golabek, C., 2011) and are therefore more likely to become models of what is considered "good practice" by those who advocate the HSW ideology.

A further strand revisits the notion that the Edexcel course seems to make broad assumptions that the students will be situated culturally and physically in the UK, thereby creating a source of tension for Arab students by virtue of their cultural and experiential context, and in a sense limiting their ability to access certain examination questions and engage with some aspects of HSW:

> I think it relies upon err … an assumption that the student actually lives in the UK a lot of the time, particularly the ecology section, and some of the simplest … I mean the best example that I give to people is that if … if you read the Edexcel course and you read the notes and you read the exam papers and the mark schemes, there's a brilliant exam question where it says about the: when a body dies, when an individual dies, what happens to their body temperature if they're outside. Now if you're in the UK it always goes down, and that's what it says in the mark scheme. But the kids in Kuwait, if it's any time in the middle of summer, it goes up! So … you know, it's these odd little things. 13(Staff).

> There's a perception that the student is in the UK … they know what a park is, they know what a council estate is, that's the best one I think … the council estate. In Kuwait there isn't a council estate, they've never heard of the concept, and yet it's a question that comes up … you know, a council estate is built on this land, what happens to it? And you go: the kids first of all can't even access the question. So do we teach them about the social and political situation in the UK in order for them to be able to answer the question? 13(Staff).

Finally there is a perception that students lack interest in the course, which contradicts much of the student data, and compromises engagement with the course, creating feelings of frustration for the teachers:

> Due to the complete lack of interest in the subject, err … they're obviously out here doing the subject because they have to, they see it as a passport to either A2 or university or some form of course abroad, and they're not naturally interested in the subject. 9(Staff).

A fascinating element emerged which alludes to the noticeable difference between the engagement with the course between boys and girls, and the possible relationship this may have to the cultural context here in Kuwait:

> A lot of it is to do with the ratio of girls to boys. Err … when I had better groups there was either a preponderance of boys to girls or both were equal. This year, out of seven, five of them are girls, and three particularly do not say anything, it's literally like getting blood out of a stone for them to say anything, and it's always me constantly prodding, constantly cajoling, nothing naturally comes from them. 9(Staff). *Why do you think that might be?* That's a very good question, and I'm not sure to be honest. I've often thought about it, there seems to be no rhyme or reason. Maybe it's … I don't know … to do with slightly lower aspirations, you know. A lot of the boys want to go abroad, I know that, and they know that in order to go abroad, and go to red brick universities, particularly in England, they need high grades. Err … talking to quite a number of girls in the … school, a lot of them are staying in Kuwait, which needs inordinately low examination results in order to get into university, so. 9(Staff). *What do you think is behind that, the boys going abroad and the girls staying in Kuwait?* Maybe parental influence, err … fathers not trusting their daughters or are scared of them going abroad and wanting to keep them here. *Why do you think they might be scared of their daughters going abroad?* In case they see another side of life. In case they experience err … things that obviously they don't have out here or they haven't experienced out here. I think that's the main reason. *Err … so … do you think then, there's a cultural influence then?* Yes most definitely. Err …

> European expectations … go off and see the world. Kuwaiti expectations … boys go off and see the world to a certain extent, but girls, no, stay here, the world is a place not for you. So they let them off the leash to a certain extent … but within certain concrete boundaries. 9(Staff).

6.8 Summary of Theme three.

In summary, the essence of the sense of discomfort with HSW components expressed by the students in the first sub theme seems to center around a recognition that they are not fully engaging with HSW when they need to be doing so. The students feel that this stems partly from their not being used to the HSW teaching approach, and partly from the teachers being reluctant to completely embrace this approach with the students. From the teacher's perspective there is a level of dissatisfaction with their perception of student enthusiasm for the HSW aspects of the course. This lack of student engagement is reasoned to emerge from a disjunction between the student's real life experience and certain aspects of the course content resulting in student's being unable to properly relate to the issues being considered.

The second strand within this sub theme seems to be associated with the difficulties students experience when attempting to engage with HSW. One element of this is the perception that the students have of themselves in terms of their ability to "think outside the box". They do not think they are very good at doing this generally, and yet they recognise a need to try and develop this ability. In particular this issue emerged strongly in respect of being able to adequately engage with ethical issues, differences of opinion, and discussion. There is also a sense of anxiety related to these issues which resonates strongly with the major concern that students have of being able to perform in the examination. One of the main concerns for the students with their engagement with ethical issues and discussion seems to center around the difficulty they experience in coming to terms with the fact that there may not be a cut and dry correct answer, which seems to conflict with their expectation and previous experience. The HSW aspects of developing the ability to critically analyse and review experimental procedures also seems to be a source of tension, again from the student perspective of being able to answer examination questions. The

students here are again preoccupied with what should be the right answer, rather than coming to terms with the fact that there can be different answers that all have some merit, and that the main point is being able to justify your point of view. Feelings of not being fully prepared for the examination seems to be a source of tension for many students when they are engaging with the HSW aspects of the course, because they see this aspect as being intangible, it is not factual and therefore for them seems to be out of their grasp and control. The main area of concern for the teachers in this strand of difficulty with aspects of HSW is trying to get the students to think critically about what they are engaging with in the course. There is also an element of apprehension when it comes to engaging critically with certain aspects of the course that are culturally and politically sensitive in this part of the world. For example discussing certain moral, ethical or religious issues.

In summary what emerges from the student perspective in the second sub theme of compromised engagement with HSW is a tension in the perception that the HSW questions do not have a set way of answering, giving rise to a sense of uncertainty which seems to be rooted in the past experience that students have with rote learning of factual information, and again in their pre-occupation with examination preparation. Because HSW is not looking specifically for factual recall, but more of an understanding of how to apply basic principles, students experience a sense of apprehension in their ability to engage with HSW effectively. Their perception of how they should be trying to develop their engagement capability seems always to be dominated by the salient perceived need to perform in the examination. There is also again for some students a recognition that their engagement with HSW aspects of the course in class is inadequate. The requirement to be able to apply information rather than simply regurgitate it seems to create a conflict for the students when answering HSW questions, since they are often unsure as to what line of thought to take in the development of their answers. There is a sense of uncertainty as to exactly what the examiners might be looking for, which with factual recall does not arise to the same extent. It is in this respect that the students perceive an element of vagueness in the questions. Together these issues conspire to exacerbate the sense of tension the students experience because they feel that no matter how

well they think they have studied in terms of their conception as to what good studying entails, which in their experience has been learning factual information, they can never be fully prepared for the examination. The perceptions of the teachers with respect to this sub theme encompass several strands. Firstly there is a corroboration of the student insight and apprehension that some of the HSW questions might be vague or inexplicit creating difficulty with interpreting exactly what the question is after. Secondly the teachers expressed a sense of compromised implementation of HSW partly due to the shorter academic year in Kuwait in comparison with the UK. This places greater pressure on the staff to complete the syllabus, and as such they feel less inclined to engage fully with the HSW aspects of the course such as discussion and debate. An interesting impression that emerged is a sense of some staff being fully acquainted with HSW and "on board" with implementing it and what it is trying to do, and others being unsure of HSW and not particularly in favour of it, seeing it more as a hindrance than a positive development. This dichotomy of vision about the teaching process contributes to a sense of tension in the department (and in the school) and resonates with the work of Toplis, R. & Golabek, C. (2011). A further strand revisits the notion that the Edexcel course seems to make broad assumptions that the students will be situated culturally and physically in the UK, thereby creating a source of tension for Arab students by virtue of their cultural and experiential context, and in a sense limiting their ability to access certain examination questions and engage with some aspects of HSW. A fascinating element emerged which alludes to the noticeable difference between the engagement with the course between boys and girls, and the possible relationship this may have to the cultural context here in Kuwait, relating to differences in parental and societal expectation for boys and girls. Finally there is a perception that students lack interest in the course, which interestingly contradicts much of the student data, and compromises engagement with the course, creating feelings of frustration for the teachers.

6.9 Theme four: The impact of religion.

Significance of religion. Within this sub theme emerged the importance and significance that students attribute to their religion, and how their religious thinking impacts on how they engage and interact with all aspects of their lives.

The influence of the majority religious thinking in the community on student's emerged strongly, suggesting that there is a tension associated with what other people might think of them when they constructively engage with some HSW aspects of the course:

> I was really interested in genetic engineering until I, you know a lot of people would complain, oh you know it's not really err … legal or there is you know like err … a religious thing to it where you're not allowed to do it, so there are quite a few things I think that you know contradict, and that really you know keeps you thinking, you know, finding another way if it helps or if you should just you know let it go and just move on so you stay on the safe side. 1(Student).

The worry of upsetting the status quo community opinion seems to be a significant issue with a sense of limiting ones interaction in order to stay safe from becoming marginalised or ridiculed:

> … it's not the feeling of being uncomfortable, it's just like err … I think it's just you know, is this right, is this wrong and you, it's like the whole idea of you're staying on the safe side cos you don't wanna make anyone, you know think of you, you know that you've provoked someone or make them think oh you know, you're not a believer. 1(Student).

> I compare err … what I already know in my religion and … compare it with the … topic that we are studying … and … probably err … that's mostly what I think about it, I compare it to what I know about in my religion, Islam. … you know saying one thing is different because, growing up in an Islamic country, your … your moral … moral perceptions have been shaped since an early age. *Does this create any issues for you at all, with the religious conviction?* It's might because, some issues might not be allowed. 8(Student). (this was relating to a question regarding the human genome project, & how this has revealed similarities between human DNA sequencing & that of all other organisms, particularly our close relationship to chimpanzees)

There is some evidence to suggest that student's experience difficulty and tension if they wish or attempt to discuss some of the issues they have engaged with in their course with their families, for example the theory of natural selection and evolution:

> Like … like for instance if I go home and sometimes err … like with the whole theory of evolution, you can't really bring it up with a lot of people, or you can't discuss it or else they would, you know they would just get annoyed by it and just cut it off and, it's like, kind of like you're very closed minded and wouldn't think that there are other possibilities about it. You know just to discuss it or just think about it. 1(Student).

The following representative examples of student dialogue for me seem to illustrate how religious thinking and the prominence of God is central to influencing how the students thinking is directed in terms of their engagement with debate and discussion on moral, social and ethical issues encountered in the course:

> You know genetic screening, you can change the genes of the human himself, you can change his hair colour and many things, and I don't think that should really be allowed because the shape is given by God, he didn't change it himself, he thinks that this shape is very good for you. 12(Student).

> We believe like in religious … in the religious part we believe in that like God made us. Err … I believe in evolution, but only to a certain degree. Yes things can get … organisms can get better with time, but I don't think that anytime soon we'll have a third arm or something (laughing) or a third leg. I think that this … we've been built like this by God and we'll continue like this. Yes there'll be minor changes but not something major. In small organisms err … they can yes, they do evolve, I believe that they do evolve, but err … just to a certain degree … of what God wants them to be. 5(Student).

> The Quran … the Quran once said err … that we … that during future, some people would try to change the genes and to make new clones and

> new … new kinds of things. So I think that they said that's Haram, that's not a good thing, so I think they shouldn't … they shouldn't do it, unless … unless err … it's so important like … like the … the criminal behaviour about monoamine oxidase A, so that's … that's something important they should do. But cloning a cow and cloning humans, they shouldn't do that because we shouldn't interfere with the creation of God. 7(Student).

The second sub theme that emerged addresses the tension inherent in the process of reconciling the discomfort associated with *thinking stimulated by scientific evidence that is perceived to conflict with religious beliefs.* The notion that there is a perceived conflict in certain areas of the course, notably again the issue of evolution, resonated strongly across the cohort, and that the students experienced a sense of tension when they engaged with the scientific evidence for the theory of evolution in for example presentation or debate activities associated with the HSW components. The tension seems to center around the discomfort experienced when the material they engage with provokes thinking that on the one hand merges with compelling evidence, such as DNA profiling of various animal and plant groups and the similarities that exist in these profiles, but is perceived by the students to conflict with their religious thinking. There is substantiation to suggest that the students generally experience significant difficulty in reconciling their beliefs with the evidence because they perceive (whether correctly or not) that their religion is telling a different story to the evidence they are faced with, given the precedence that religion has in their lives:

> Uncomfortable when it comes to evolution because having to compare between religion and bio … err … science, they are totally … they are two different things, err … they give you two different answers. In religion we didn't believe evolution. Like err … as in the humans that were evolved monkeys. But in biology they have supporting evidence that this actually occurred. So … it's not … *You find that difficult?* Yeah. You don't know which one to believe actually. *Err … So could you describe to me err … some of the thoughts and feelings that you have when you are exposed to that? You said not comfortable?* Yeah, because … you have these two thoughts interacting like … clashing into each other like it's … it's err …

> fake, or it's true. It's difficult to interpret them both at the same time because, obviously we need this for the course and … we are not supposed to believe this because of the religion, so that's … 8(Student).

A common technique for dealing with this conflict and tension seems to be to put the information to one side and either ignore it or compartmentalise it in order to divorce the issue from their daily lives:

> Yeah … I have put it in a pigeon hole to be honest (laughing). *How do you think it might make you feel if you are required to take it out of that pigeon hole?* Err … it would feel uncomfortable really because … because of the conflict between science and the religion. 8(Student).

> But err … we have err … so, we may have evidence but is it really true. So can we believe that because it happened so … so long ago … you don't wanna believe that. *So does that create any issues for you? Your Islamic faith with what's coming out of the Human Genome Project, and it's support for the theory of evolution?* Err … in times I won't get confused because we have beliefs and we will stick to that. … some people might think it's offensive, saying that we're actually related to chimpanzees in some way or another. 6(Student).

Where this tension is more acute and uncomfortable, there is a tendency to reject the evidence altogether and withdraw into the comfort zone of their religious teaching without attempting to reconcile the two:

> It … it's easier to know that God made us this way, than knowing that … this person was an animal a long time ago, so. That's why I think God made us, that's why I know God made us this way. 11(Student).

The final emergent sub theme illustrates the *difficulty or impossibility of keeping religious perspectives out of ethical and moral considerations*. Because in this cultural context religion is central to all things, any engagement with ethical and moral discussion will inevitably draw upon the student's religious thinking. If that religious thinking is informed by inflexibility by virtue of the student's perceived interpretation of their religion, then this issue can be reasonably assumed to

compromise full and constructive engagement with ethical and moral considerations:

> But at the same time, it's quite a difficult subject. I mean different … difficult topic to talk about because you have those different factors and you have … all of these religious views and cultural views that in the end influence your moral view, and … and that view is not necessarily the same … as what other scientists, you know, what other countries would see. 10(Student).

> Many … many people have many ideas and the way they think. You know I think that's why the genetic screening is not available now in many countries, it depends on the religion, on the society. When you get down to it, many people refuse and say no you can't do it, and … or religion like banned it, or the culture that we are living in banned it. 12(Student).

The teacher perspective regarding the theme of religious impact encompasses several strands. There is a strong sense of caution and even trepidation evident when engaging with social, moral, & ethical issues associated with how the students draw upon their religious thinking when engaging with these matters:

> Well I suppose it was to do with err … stem cell research and totipotency. And we were going on about when is a life a life, when do you call something alive and something as dead? And then one of the pupils asked me straight out: "Sir, do you believe in God, do you believe in Allah?" And I thought, wow, be very very careful here, so I just stamped it out. I said what my religious viewpoint is, is none of your business. I said it has no err … relevance in this particular lesson, so let's leave it out. I think as soon as you start getting grey areas with religion, then you start coming unstuck, particularly out here. 9(Staff).

This particular rhetoric also highlights for me how the teacher participant is in a sense alienated from the culture of the students to a certain extent by virtue of negating the relevance and importance of the religious dynamic, which in Arabic culture is central to everything. Clearly the religious undercurrent that pervades the student participants thinking is a source of tension for the teacher.

There is an evident sense of apprehension about the possibility of inadvertently getting into difficulties with the parents and the authorities where religious thinking informs the student participants engagement with the social, moral & ethical aspects of the course:

> And also introducing grey areas like ethics and moral values can quickly be bogged down and could get you into trouble if you're not careful, particularly out here. 9(Staff).

An example of how religious thinking is perceived by teachers to shape and form the student's engagement with these aspects of HSW includes:

> I had a student come the other day because err… I'd mentioned that certain crop plants are actually hybrids of two other plants, so they actually have the genes from the two, and he came and said that in the Quran wheat is accepted as something you can eat, it's you know, it's fine it's not haram. And he said, but if there's two different plants been stuck together you've done genetic modification so does that mean genetic modification is unacceptable? 13(Staff).

The second strand within this theme focuses on teacher's perception that the religious dynamic actually compromises student engagement with the social, moral & ethical aspects of HSW within the course. There is a sense that the ability of the students to fully embrace and immerse themselves in open critical discussion and debate is curtailed:

> Yes, I think in some ways they are straight jacketed in terms of their outlook on life. They see it purely from a religious point of view, and they don't analyse or engage in critical thinking as to, you know, other possible arguments for and against. They see it purely as a religious, moral aspect, and that goes back to the way they've been brought up. 9(Staff).

The third strand relates to feelings of teachers themselves encountering compromise and frustration in their ability to engage the students fully with social, moral & ethical debate because of the perceived religious conflict with what they are trying to do:

> So a lot of the time, discussing this I have to keep my mouth shut, I can't discuss it openly because of the nature of the beast. 9(Staff).

Finally there is a sense of conflict between certain aspects of the curriculum relating to social, moral & ethical issues, and the religious ascendancy. On the one hand teachers feel they must cover these matters because they are in the specification, but feel vulnerable in doing so because of the possible repercussions that might be invoked as a result of inadvertently causing offence:

> Yes, but err … on the curriculum it goes on about natural selection. In natural selection you have to discuss it, I only discuss it very briefly and with very simple examples, and then I move on, but it is on the curriculum and they have to know it. 9(Staff).

6.10 Summary of theme four.

Within the first sub theme of the significance of religion to the students, emerged the importance that students attribute to their religion, and how their religious thinking impacts on how they engage and interact with all aspects of their lives. Religious thinking and the prominence of God seems to be central in influencing how the students thinking is directed in terms of their engagement with debate and discussion on moral, social and ethical issues encountered in the course. The influence of the majority religious thinking in the community on student's emerged strongly, suggesting that there is a tension associated with what other people might think of them when they constructively engage with some HSW aspects of the course. The worry of upsetting the status quo community opinion seems to be a significant issue with a sense of limiting ones interaction in order to stay safe from becoming marginalised or ridiculed. There is also some evidence to suggest that student's experience difficulty and tension if they wish or attempt to discuss some of the issues they have engaged with in their course with their families, for example the theory of natural selection and evolution.

The second sub theme that emerged addresses the tension inherent in the process of reconciling the discomfort associated with thinking stimulated by scientific evidence that is perceived to conflict with religious beliefs. The notion that there is a perceived conflict in certain areas of the course, notably again the

issue of evolution, resonated strongly across the cohort, and that the students experienced a sense of tension when they engaged with the scientific evidence for the theory of evolution in for example presentation or debate activities associated with the HSW components. The tension seems to center around the discomfort experienced when the material they engage with provokes thinking that on the one hand merges with compelling evidence, such as DNA profiling of various animal and plant groups and the similarities that exist in these profiles, but is perceived by the students to conflict with their religious thinking. There is substantiation to suggest that the students generally experience significant difficulty in reconciling their beliefs with the evidence because they perceive (whether correctly or not) that their religion is telling a different story to the evidence they are faced with, given the precedence that religion has in their lives. A common technique for dealing with this conflict and tension seems to be to put the information to one side and either ignore it or compartmentalise it in order to divorce the issue from their daily lives. Where this tension is more acute and uncomfortable, there is a tendency to reject the evidence altogether and withdraw into the comfort zone of their religious teaching without attempting to reconcile the two.

The final emergent sub theme illustrates the difficulty or impossibility of keeping religious perspectives out of ethical and moral considerations. Because in this cultural context religion is central to all things, any engagement with ethical and moral discussion will inevitably draw upon the student's religious thinking. If that religious thinking is informed by inflexibility by virtue of the student's perceived interpretation of their religion, then this issue can be reasonably assumed to compromise full and constructive engagement with ethical and moral considerations.

The teacher perspective regarding the theme of religious impact encompasses several strands. There is a strong sense of caution and even trepidation evident when engaging with social, moral, & ethical issues associated with how the students draw upon their religious thinking when engaging with these matters. The religious thinking of the students is perceived by teachers to significantly shape and form the student's engagement with the social, moral and ethical aspects of HSW, and yet the teacher participants seem to be in a sense

alienated from the culture of the students to a certain extent by virtue of negating the relevance and importance of the religious dynamic, even though they are aware that in Arabic culture religion is central to everything. Clearly the religious undercurrent that pervades the student participants thinking is a source of tension for the teacher. There is an evident sense of apprehension about the possibility of inadvertently getting into difficulties with the parents and the authorities where religious thinking informs the student participants engagement with the social, moral & ethical aspects of the course. The second strand within this theme focuses on teacher's perception that the religious dynamic actually compromises student engagement with the social, moral & ethical aspects of HSW within the course. There is a sense that the ability of the students to fully embrace and immerse themselves in open critical discussion and debate is curtailed. The third strand relates to feelings of teachers themselves encountering compromise and frustration in their ability to engage the students fully with social, moral & ethical debate because of the perceived religious conflict with what they are trying to do. Finally there is a sense of conflict between certain aspects of the curriculum relating to social, moral & ethical issues, and the religious ascendancy. On the one hand teachers feel they must cover these matters because they are in the specification, but feel vulnerable in doing so because of the possible repercussions that might be invoked as a result of inadvertently causing offence.

CHAPTER SEVEN.

DISCUSSION OF THE PHASE II DATA ANALYSIS.

7.1 Advance organizer for Phase II data analysis

7.2 Summary of Phase II main themes and subthemes.

For the purpose of clarity the main themes & sub themes for the phase II data discussion are listed below:

OVERARCHING THEME	PARTICIPANT ISSUES	FOCUSSED
EXAM PERFORMANCE DRIVEN	This is the main concern	**PASSING THE EXAM & GETTING INTO COLLEGE. PARENTAL PRESSURE / EXPECTATION.**
	Goal of getting into a specific university course or job imperative	
	Parental expectation or pressure	
	Element of discomfort with some parts of the course	
PREFERENCE FOR INFORMATION BASED LEARNING	Used to learning factual information. Difficulty with new way of teaching	**PARENTAL EXPECTATION & PARTICIPANT PAST EXPERIENCE OF TRADITIONAL TEACHER CENTERED, KNOWLEDGE BASED T & L.**
	Parental expectations of traditional learning	
	Desire to get the information	
	Passing the exam as main concern	
	Parental pressure on students & teachers	**EDUCATION FOR UNDERSTANDING OF LIMITED IMPORTANCE.**
	Education for understanding of limited importance	
REACTION TO / PERCEPTION OF HSW	Ambiguity / wording of questions in HSW	**HSW IS CULTURALLY & ENVIRONMENTALLY BIASED CREATING A DISADVANTAGE FOR PARTICIPANTS.**
	Assumption of UK based environmentally & culturally	
	Perception of disadvantage due to none UK exposure	
	Parental / cultural influence on ability to engage with HSW	

	Narrow cultural perception of education / HSW irrelevant	
IMPACT OF RELIGION	Social & cultural pressure to conform to a perspective	**SOCIAL & CULTURAL PRESSURE TO CONFORM TO A SPECIFIC RELIGIOUS PERSPECTIVE PLACES CONSTRAINTS ON ABILITY TO ENGAGE WITH ASPECTS OF THE COURSE.** **FREE THINKING MAY CREATE CONFLICT.**
	Compromised ability engage with social, moral & ethical issues	
	Conflict between scientific evidence & religion	
	Evolution in specification causing tension	
	Religious perspective is only correct	
	Education & free thinking leading people away from religion	

7.3 Theme one – Exam performance driven learning.

Three sub themes emerged: Firstly reiteration that *passing the exam is considered to be the main aim* by the participants. Secondly reiteration of the *goal of getting into a specific university or profession*. Thirdly reiteration of a sense of *parental expectation or pressure.*

The first sub theme of *passing the exam being considered salient* emerged strongly, corroborating the phase I data:

> And of course I want to pass as well because that is like … that is the main thing about the whole thing, you know. *It's the main thing?* Yeah it's the main thing." 1(Student). "… Yeah … it is … it is, like I said, it is like the major thing of the whole course. The main aim is to get the grade, because it is really important, and it is what's gona get you to university. 1(Student).

Some of the students seemed to recognise that some skills development had taken place, but the skills based emphasis in the course did not register with the students as being important or part of their overall aims, rather the development of skills was considered to be incidental rather than contrived:

> I do … I do want to pass, I mean that is the first. But then I don't think like … I don't think I set myself any goals, but then as I progressed along the course I can see that I developed skills, for example communication and stuff like that … debating and all that. So they weren't my goals but I did develop them unintentionally I guess. 2(Student).

An interesting comment made by one of the participants who had been exposed to several years of education in the UK suggests that for this particular individual, passing the exam whilst being important, was not the main goal, but was perceived by this person to be the main goal for most of the other participants:

> Err … well personally I find that a bit … that's not really my goal. I'd say that's quite a typical one for a lot of the people here. *Right. But not for you?* No I wouldn't. I see that as like a learning process. They'll teach you like skills for later on in life, not just to get a grade. I think you should do stuff that will help you in life, not just for a piece of paper. *Right. But do you feel that that is a statement that most people would agree with here?* Definitely yes. Most of my friends and a lot of people. 3(Student).

The teacher participants corroborated the dominant student perspective suggesting that there seems to be a prevalent narrow view of the purpose of education, and that the development of transferrable skills has a low priority:

> Yeah, I mean out here in the Middle East, particularly Kuwait, they see doing an exam err … not just testing of knowledge but they see an exam as a passport to university. Err … it's very narrow, err … but I understand why it occurs, particularly with parental expectations. They don't see education as err … they don't see education in the wider context, you know, and err … broadening their knowledge of the world, studying for studying's sake … it has to be relevant to them and if it isn't relevant to them they have great difficulty in, you know, processing that information, which makes it very difficult as a teacher. 9(Staff).

In the second sub theme, the *goal of getting into a specific university or profession*, again this corroborated quite strongly the phase I emergent theme, with student's viewing this as a major goal in their education:

> Well I think it's supposed to be so because err … after err … finishing school … after passing these exams we move on to universities. These exams err … get us into the good universities, into the top universities, so that's why. 11(Student).

What is interesting is the emergence of a suggestion that this relatively narrow view of the purpose of education may have links to a cultural influence and a preoccupation with status, whereby the majority of people in the Kuwait context are less open to alternative ideas about teaching and learning:

> *So you feel there's a kind of a status issue behind that?* Yes definitely, and I think it's the parents as well and the way they raise their children in this culture. 3(1). *Right, OK. So why do you think in this part of the world, or in Kuwait in particular, they have this … cultural issue that is very status orientated … status focused?* I think everyone's trying to get on top … like make the most of it, whereas in England I … like when I was in school there, it was all about … they taught you skills basically, not just for exams, and they do course work as well for the exam. But here it's more like practical and … it's one set way of thinking, they're not really open to other ideas and stuff. 3(Student).

Again the teacher participants corroborated the narrow student perspective on the purpose of education with regard to this sub theme:

> I think it's more of a case of "I wanna go to university … I need to get three of these … that's what I'm doing. … jumping through hoops, getting a piece of paper stamped, which is what they're doing. 13(Staff).

The third sub theme of parental expectation or pressure remained evident in the phase II interviews, though it did not emerge as strongly as in phase I. Interestingly though is the nuance that the experience of parental pressure and expectation to succeed academically and enter a high status profession has a possible cultural foundation to it:

> Yes definitely, and I think it's the parents as well and the way they raise their children in this culture. *So there's a certain parental expectation as well?* Yes definitely. *Right. Where do you think that parental expectation is coming from?* I think it's probably the culture, I mean the parents … the parents have probably been raised like that, and society … like people with better jobs like, you know, they're more popular. 3(Student).

There is a suggestion that this social pressure the students are subject to is a source of tension, particularly for boys:

> *Where do you think that pressure is coming from … is there a social pressure?* Err … it might be … it might be pressure coming from like err … relatives, people from around you having high expectations for your grades, so that can cause a high amount of pressure on you, knowing that you have to do your best. *Right. So could you sort of describe your experience of that pressure to me from parents and from relatives?* Well knowing err … that err … that I'm the only boy between my sisters … I'm the only boy. My mother has high expectations … even my father has high expectations err … they want me to get the best grades as possible, they want me to go in to medicine, for that to happen I need almost perfect grades, so that can be a bit hard … not impossible, but hard. 11(Student).

This sense of parental expectation and pressure is corroborated by the teacher participants:

> *Right. Do you think there's any significant parental pressure there?* I think so, I think the parents have got this mentality. I think a lot of the parents are of the thing that once you get to this age you're an adult, once you get this number of certificates you get to get the job … that's what happens … jumping through hoops, getting a piece of paper stamped, which is what they're doing. … I think the older students do, but it's often they do because … they've been told so often their entire lives that's what they're gona do. 13(Staff).

As in the phase I data, the teacher participants corroborate the view that this evident parental pressure on the students (and the school) may at times be unrealistic:

> … and a lot of the time parental expectation is … far too high, very unrealistic, and it seems to come down to a very narrow range of courses … the parental expectation to go off to university is so high they've never

> actually thought about what it entails in terms of passing the exams. 9(Staff).

There is also a suggestion that this parental pressure and expectation may be related to cultural issues of status and saving face:

> … the Arab mind set of saving face, to say to another parent my child is going off to do doctoring or medicine abroad, or they're going into mechanical engineering err … It's very narrow, very prescriptive and … it occurs widely out here it seems to me. *When you say saving face, what is it you're getting at there?* Basically to say that my child is bright enough to cope with an academic course. Obviously out here there are no vocational courses, and even if there were I suspect that most parents would not be comfortable with their offspring going into these sorts of courses, again because it might reflect on them, you know, their expectations are a lot of the time unrealistic it seems to me. *So there's … you feel that in the culture here there's a … a need to appear from the family point of view high status?* Yes, high status really, particularly in the Arab mind set, comes with coping with high academic courses, err … and that status is enhanced if they're good enough to get into a British university. 9(Staff).

7.4 Theme two – the preference for information based learning.

This theme from the phase I data is again clearly corroborated in the phase II data. Several sub themes emerged, firstly the student's *past experience of being used to learning factual information.* This sub theme emerged more strongly in the phase II data, which revealed different nuances to the experience of tension amongst the cohort. There is a perception that factual information based learning is preferred because it is easier than having to deal with the none factual aspects of the course which are considered to be difficult when one has not been used to engaging with such aspects:

> I think it's because it's easier to prepare yourself, for questions which you already … you already know they're gona ask you. Before hand, you know, you're gona read the text book and know that it's gona be based on

> the information fed to you. And I think it … it is difficult if you are so used to that way of learning. 10(Student).
>
> *So are you saying to me there then that you have a preference for knowledge that is fact rather than theory or opinion?* Yes. I think yes. *Could you tell me why?* Because theory can change, and fact is easier to learn *And you prefer that?* Yes it's easier, that's why I prefer it. 5(Student).

There is corroboration of the view that the expectation in the Kuwait context is that education is all about the teaching of factual information:

> *What do you think the expectation is in Kuwait generally for teaching?* Well err … I think the err … the factual teaching should be taught in Kuwait so … because whenever you teach the facts … you should know the facts and go in the exam and pass. You have no excuse not to pass because you already have the facts. Your part is to study … the student's part is to study. 11(Student).

There is a sense that this societal if you like expectation of traditional teaching is where the student's feel at ease, and the notion of attempting to change the education process away from what they are used to in a relatively sudden way is a source of discomfort and tension:

> I think that they're not used to anything else (factual based learning): *OK. So that's what they expect?* That's what they feel most comfortable with. *That's interesting you should say that. That's what they feel most comfortable with. Could you shed a little bit more light on that for me?* Err … well if you've been taught in a particular way all your life, and suddenly just changing that … I think that would cause a lot of tension and … people would feel like they've just stepped out of their comfort zone and they don't know what's going on. But I think … even the society here, I think they prefer to stay on a traditional more comfortable road and try to keep it that way. *Yeah, I see. Alright. So would I be right in saying then that introducing … a more skills based type of learning approach, which is what the HSW aspects of the course are, creates a kind of tension in this*

> *cultural context where the students and the parents are more used to … or their expectation … is that of a more traditional learning style?* Yes, definitely. It does cause a lot of tension. I know that my friends did. *A lot of tension?* I think it does cause a lot of tension… 3(Student).

The nature of this tension is brought more clearly into focus, revealing sentiments of discomfort, confusion and feeling scared, and further corroboration of the student participant's fixation and anxiety associated with being able to perform in the examination:

> Definitely. Err … I'd say even during my AS I struggled because that is what I was used to. I was used to just learning facts and then doing past papers. *So … once you started getting exposed to the HSW aspects, which is skills based rather than information based at AS level, did you find that created some kind of tension?* Definitely. I was … I was confused because I didn't … we weren't really taught that so I didn't really know what to do or how to answer them. It was really confusing that, yeah. *Are you able to share with me something … a flavour of that tension that it created?* Err … well … I felt … I felt (laughing) a bit scared to tell you the truth, because … we didn't … it was like something … it was something very new… 3(Student).

Again this sub theme of student's being used to information based learning is corroborated by the teacher participants:

> Yes I mean when you say they're used to … when you say what they're used to, that's absolutely right (information based learning) … 9(Staff).

The second sub theme of a *parental expectation of traditional teaching and learning* emerged very strongly:

> *What would your parents regard as a good teacher, what would they expect you to be getting when you come to the class that they're paying for?* First of all getting all of the facts, getting the correct facts, getting taught … a good teacher you might say that teaches the facts and gives you the facts. 11(Student).

Again several strands of sources of tension within this sub theme were revealed. An interesting element that emerged is the notion that sometimes there is actually conflict between parental views impinging on the student experience, and that often there is a lack of appreciation that a student needs time to understand a concept before deep learning can take place:

> *So would you agree then that there is a parental expectation for a more traditional type of education?* Err … mainly I think it is, yes. But at the same time err … then like both parents could have like different opinions. Like my Mom sometimes will say like learn, learn, learn … just make sure you know everything, while my Dad stresses on understanding. So it depends on the parents … one of the reasons why he really wants me to do well is so I can go abroad and you know, get an education that's better than I'll get here. *So … so far out of this I'm getting that, yes it's important you need to pass that exam and get the grade to go on to medicine or whatever it is you want to do. Err … but at the same time you understand the value of the HSW aspects of the course and the approach?* Yes. *But you're getting a pressure from your parents, and perhaps other members of the family, which … where maybe they don't understand that point of view that you have about education?* Yeah. … So I think yeah, we need err … they don't really understand that, sometimes it does take time to just understand the whole process before I can actually learn. 1(Student).

A further strand within this sub theme is the notion that this parental pressure for traditional teaching and learning may have its origins in the learning experience of the parents themselves, who are perceived to have largely been exposed to a factual based learning process. There is a perception that the parents generally do not empathise with the other aspects of the learning process and that they are a source of pressure on the teachers to teach in the way that the parents expect:

> I think yes. Most parents expect that, and they just care about passing the exam, they don't care about the … like … what's maybe err … what extra things we learn from school, what values we take from school, they wouldn't … they wouldn't care about these things. I think they only want

> the student to get the information and pass the exam. So if the parents hear that the … the students aren't getting the information in the traditional way, they might be mad or get upset with the teacher or the school. *Right. Where do you think that kind of view that the parents have is coming from? Why do you feel they have that view?* Err … I think because it's from the Ministry schools. 5(Student).

One perceived manifestation of the nature of this pressure on the school is that if parents feel that the school is not delivering in accordance with their expectations, then the school may lose clients, remembering of course that the participant school is a business enterprise:

> *Do you feel that there is a pressure on the school and on teachers from parents and perhaps from students err … because of this err … perceived view of what they consider to be good teaching?* Definitely, because there's … the school itself wouldn't … it wouldn't want to lose students and kids, and if the parents don't think the teachers are teaching in a suitable method then they would probably move the kids, which would force the school … force the teachers to adapt their methods … the teaching. 2(Student).

This point of view whereby the parental expectation and influence on the school can be sufficiently forceful that it sways the teaching and learning methodology is also corroborated by the teacher participants:

> I think people in Kuwait … Kuwaitis or anybody else, when they think about British education, imagine a man sat there with a big black gown on and a stick and a chalk board and the students are lined up. *Mr. Chips?* Mr. Chips … perfect example yeah. *You brought that up in your first interview.* Yeah. And it is … I think they do do that, and I think they perceive that, and they think that is the best way and how it should be. 13(Staff).

A further interesting dynamic associated with this strand of thinking is the perception that the tension experienced by relatively new young teachers from the UK coming into the school can be sufficiently intense to result in them

actually leaving the school rather than compromising their ideals regarding what they are trying to do as teachers, or adapting to the different cultural setting that they find themselves in:

> Yeah I mean they've seen it all before haven't they? Err … for example I've been out here ten years and the amount of staff that I see err … not only around the school, but particularly in the science department, obviously coming in trying to change things … swim against the river, and end up getting very demoralized and leaving. I've seen it countless times, they try to implement systems that belong in the UK, and the parents see systems out here as … I suppose narrow, and exam orientated, but that's the reality out here. In the end the pupils need to pass and they need to get to university. 9(Staff).

Finally within this sub theme emerged a sense of conflict between the staff and the senior leadership team in terms of differences of opinion about what we are trying to do as teachers and what we should be doing with respect to the cultural expectations of the students and parents:

> I seem to think they're buying in to … well almost like a Goodbye Mr. Chips err … they see sending their offspring to a private school is going to have a private based ethos, which in fact … I mean let's face it, all the schools out here are nothing but … fee paying comprehensives, they're not private err … they don't have a private school ethos, well in this school certainly! Class sizes are far too big; they're not run on traditional lines, and that creates great tension between us as teachers and … not the parents so much, but the senior management team who expect us to implement systems based in the UK. 9(Staff).

The third sub theme of an evident *desire to get the information* in order to succeed in the examination corroborated much of the sub themes on information based learning in the phase I data. Probing revealed three interesting strands within the sub theme. Firstly corroboration of the perceived importance of simply getting the facts and a sense of feeling comfortable with just getting the facts, implying possible discomfort associated with education that tries to do more than

this, but at the same time acknowledging there may be a better way of doing things:

> … for me it's all about having the notes. Like if I have the notes then I'll be fine … the expectation is traditional. … that's kind of the way I've been taught and a lot of people are comfortable with it. It's kind of the only learning experience I've known, and it has worked you know, I can't say it hasn't, but that doesn't mean there are different ways in order to teach that, or even better you know. 10(Student).

Secondly there is a sense of time being a constraint on doing anything beyond simply getting the information, corroborated from the phase I data. This relates to the shorter academic year in Kuwait in comparison with the UK:

> *A suitable teaching style … could you explain?* Yes. Something that is fun, and something that also gets the information quickly to you and clearly. *Is … information being portrayed to you quickly … is that important?* I think so, because here in the AS syllabus we finish really quickly … we have to finish quickly because we don't have enough time. We have like err … two, three months and then the exams and then we finish. So it has to be quick organised time. … here we have more holidays, more breaks. 5(Student).

Thirdly there is a flavour of the dichotomy of pedagogy within the teaching staff and how the more traditional teachers value the factual information based learning over the skills based content:

> The more traditional teachers err … they are the opposite, they do find HSW difficult because they're more traditional in their methods err … they see factual based learning as more important than this idea of skills. 9(Staff).

Again within theme two the importance attributed to passing the examination and the perceived pressure from parents to succeed academically emerged as it did in theme one, discussed earlier, further corroborating the tension, inherent in these phenomena, from the phase I data.

The final sub theme of *education for understanding is of limited importance* addresses the evident lack of appreciation for modes of teaching and learning that place emphasis on understanding as distinct to factual recall. Within this sub theme is a suggestion once again that this attitude to education has a cultural foundation to it:

> They don't really care whether you understand it or you actually have let's say a passion for the subject or want to actually learn something new. They just … they don't really find it important.
>
> It is kind of a cultural thing, which is why I think in Kuwait when it comes to schools then people just assume you know just get a pass, do whatever, give them the information, who cares if they understand or not. 1(Student).

7.5 Theme three – reaction to and perception of HSW.

The emergent focus in the phase II data corroborating the same theme in the phase I data is a perception that HSW is culturally and environmentally biased toward students who live in the country of its conception, i.e. the UK, creating a sense of disadvantage for students in the Kuwait context. Several sub themes emerged and probing brought the theme more clearly into focus. The first sub theme centers around issues associated with the wording of examination questions and a *perception of ambiguity or lack of clarity* as to what the examiners are actually looking for:

> Yes definitely. It's the way they word it … I'm not very familiar with it. *The way they word it? What do you mean by that?* Just … just like … I don't really know where they're getting that. It's not just like describe the process of photosynthesis or something. It's all like … asking you to like … I know it sounds weird, but it's asking you to think on the spot, and I'm not used to doing that in an exam. 3(Student).

This sense of ambiguity is corroborated by the teachers, though participants found it difficult to illustrate their concern with examples:

> *Right. So … would you say then that there is a sense of ambiguity in the Edexcel questions, or what could be perceived as ambiguous, or at least the students are at a disadvantage in being able to interpret what the question is after?* Oh yeah, I think … I think consistently Edexcel is a: " You do this in the UK company." They've expanded outside but you know, even if you look at the way they design their exams and they promote their exams, they're not promoting to everywhere else. 13(Staff).

There seems to be a sense of tension associated with being unable to identify exactly what the examiners are wanting in the answer to questions, and a perception that this vagueness makes it almost impossible to obtain full marks for a question even if the participants are confident that they have mastered the relevant information. Again this strand within the sub theme resonates with previous concerns in the phase I and II data about being able to perform in the examination:

> I think it's hard to get all of the points that the mark scheme wants … wants you to get. Even though you understand the question itself and you're able to provide the information, it's hitting in on the mark and if you don't kind of hit it and you go off in a really narrow direction … if you kind of stray away a tiny bit to the right, a tiny bit to the left … you don't get the marks and then you lose out on important marks. It's not a question of it's difficult to understand, it's just difficult to get the marks. *So if it's difficult to get the full marks, what is it that's actually causing you to possibly drop those two or three marks that … that you might have otherwise got?* Maybe … I dunno … if the question is bit too vague … You know the answer, but it's completely different to what they wanted you to take. 10(Student).

These sentiments of vagueness and lack of clarity about what is expected are corroborated by the teachers:

> There seems to be a clash between what they (examiners) expect and what the question is actually asking. Even checking the mark scheme, the answers are very wooly; sometimes I wouldn't even have thought of the answer! 9(Staff).

The second sub theme is associated with a perception that there is an *assumption students are based culturally and environmentally in the UK.* Three strands emerged during probing. Firstly there is a sense of compromised ability to engage with aspects of HSW relating to a limited environmental exposure in the Kuwait context:

> Sometimes … I think it is because err … it's mainly to do with the practical work I think, in a way, and some things you don't get to see here, so it can be difficult to actually comprehend. Err … whereas other parts of the HSW are more just err … understanding from the information that you've been given and you can just link the two together. *What do you mean by "some things you don't see here"?* Like … how, I think it was … it's mainly with the ecology section, and how you have parts you have explained to you … the practical investigation and how it all works, and that … you don't see much of that happening here … it's … it's like it's not the right environment for it, so you can't really do any of it. 1(Student).

Secondly there emerged a strand of tension relating to a sense of cultural restriction associated with practical field trips where boys and girls are not expected to mix, and an attitude toward such practical field work that places low value on it, thereby compromising the student's ability to achieve academic success:

> *Do you feel there are more restrictions here then on err … being able to go out and do field trip study work?* Definitely, first there is probably segregation and that seems to be a main issue in the country for some reason. And even if it's in school, like a school trip … and then there's probably some parents complaining about like, you know, when boys and girls mixing and then going out and … and they probably feel like that's not really studying. *So you … you feel that being in this culture actually compromises your err … ability to compete with the students in the UK when it comes to the examination grades?* Yeah I definitely agree with that … because the exams are made there anyway, so … yeah. 3(Student).

Thirdly there is a perception that attitudes toward social, moral and ethical issues are significantly dependent on which part of the world you have been brought up in, and so when faced with examination questions that have been devised in the UK social, moral and ethical context, this dynamic impinges on participant's ability to engage with the question:

> Students all over the world have different moral influences, you know, or different religious influences, so to like lose a mark because you have a different ethical approach to something … that's the difference then between an A and B, and a B and a C just because you see something to be ethically correct or ethically wrong. *So do you feel that there are questions that do encroach upon your own ethical values?* Yeah. 10(Student).

One of the teacher participants made an interesting observation which illustrates an example of cultural dissonance relating to examiners setting questions in the UK context, and that can have significant implications for students in a different environment:

> … they're actually growing up in an environment that isn't British … And so we've got exam questions that are written by individuals that have sometimes never left the UK, and they don't actually consider those people who are reading the question from somewhere else, you know, when you ask them about, you know, grass and the fact that in the summer it grows more than in the winter, they (students in Kuwait) just go: "Well in the summer it dies because it's too warm. 13(Staff).

The third sub theme illuminates a perceived *parental and cultural influence on student engagement with HSW*. On the one hand there is a suggestion (whether rightly or not) that there is a cultural impact which discourages individuals from standing up and expressing their point of view, thereby compromising engagement with discussion and debate, and possibly creating conflict within the group where individual perspectives are aired:

> *So given the … the perhaps more conservative traditional society that we have here in Kuwait, do you think that has an impact on some of the*

> *students being able to engage with certain aspects of the HSW, for example discussion or debate, or as you said standing up in front of people?* It does because … the fact that they don't believe they're allowed to or they have the right to stand up and face their opinion, which they might not be able to do at home. So they might not be as strong enough or not have the self-confidence to stand up and face it, and that does kind of rub off on fellow students in a way, having one student with that mentality could easily affect his friends, her friends, fellow students, and it does rub off on the entire group, it does affect the entire group … eventually. 2(Student).

On the other hand a sense of fierce competition emerged where there is a parental anxiety linked to academic success for their children and the perceived fight for survival in this cultural context, resonating with the importance of status and lack of appreciation for skills based learning and its contribution to success previously discussed:

> England's not traditional … it's not very traditional. It's not got set traditions, but here there are like … basically the main religion is Islam, then they've got like a main religion, then they've got culture stemming from that. And so yeah … I think it's got something to do with the culture here. *What do you think it might be in the culture here that makes it difficult then for … or … or let's say creates a reluctance to engage with skills based learning?* Maybe … I've noticed that actually, a lot of people compete with each other here, they don't really help each other and … it's kind of like getting the best job and getting more money and like, you know. *That seems to circle back to something you said earlier on in the chat … that there's an emphasis on status yeah, in terms of education as a means to attaining a particular status, and that's very important for them. Is that what you feel?* Yeah. I think definitely in this country, more than in England, status is a lot. Basically it defines the rest of your life living here. I think parents are scared for the kids … kind of like they want them to be successful and they know that there's kind of like a competition here … like a fight for survival kind of, you know. 3(Student).

The final sub theme relates to the suggested prevalent *narrow cultural perception of education* as a means to an end and *HSW being considered largely irrelevant* to the salient goal of the participants. This sub theme resonates with the sub theme of education for understanding being considered of limited importance that emerged in theme two of the phase II data. The following transcript rhetoric gives a fascinating insight into the perceived tension inherent in this sub theme from the perspective of a participant who has experienced school education in both the UK and Kuwait, again reaffirming a sense of confusion and helplessness experienced by participants who have been raised in the more traditional Arabic cultural context:

> For me HSW actually broadens my understanding of it. *Right, OK. Why do you think that's the case then … why do you think it's different for you?* Err … well it could be that I was born in England and I'm used to that stuff. Or it could just be that … it probably … probably is my parents, the way they … they don't expect that traditional way of teaching, and they've not raised me to think like that. Or maybe like some person who's been raised in the Arab society, and then they've got more of a traditional way of thinking … probably. They only learn what they need, not what … not like … they don't wanna like … deepen their knowledge, you know. *Yeah, OK. So that comes back to … what you've just said there kind of reaffirms something that cropped up earlier on that … in … the majority of people here would probably see the HSW aspects of the course as being unnecessary, yeah?* Yeah. *And actually getting in the way of them passing their exam.* Definitely yeah. I've heard that a lot. *So err … did they talk much about that … their experience of it? How it made them feel?* Well they just seemed like … like really like … they seemed kind of helpless and confused. Like the tuition teachers couldn't help them … on those questions, and they didn't know how to think for themselves … so it kind of guaranteed loss of marks … they felt like they just couldn't do it. 3(Student).

There is further reaffirmation from one of the teacher participants regarding the perceived irrelevance of HSW to the participant goal of getting to university and entering their chosen profession, and interestingly a sense of, if you like

resentment, associated with a suggested colonial style imposition of contemporary notions of teaching and learning pedagogy on the participants in this dissimilar cultural context:

> Saying that though, both groups whether poor or good, less academic or highly academic, found HSW irrelevant. *Why do you think they found it irrelevant, here in Kuwait?* Good question, err … again it just goes back to what they're trying to do, to get to university, to get good exam grades. You can only do that by working hard on the more academic side of the course. … there's a difficulty isn't there, implementing the British way of education out here with Arabs, … We try to follow the UK but there's definitely a clash there. *Right. So in a sense it could be viewed as like a second wave of colonialism?* Yes (laughing) err … what is colonialism? Err … people, when I think of colonialism, is people imposing views and systems on people that really don't want it. That's not strictly true out here. We want to implement a traditional way of teaching out here to cope with the demands of the courses. Unfortunately we're held back by people like senior management, who expect us to implement what's happening in the UK. *When you say we want to implement, who are you referring to?* I think most of the staff out here, err … particularly in science, err … *Why do you think the staff have that view?* A lot of it goes back to what they've been used to. A lot of it is to do with the pressure to get exam grades. Let's face it, those who know their subject will get higher exam grades, it's as simple as that. 9(Staff).

Finally there emerged from within the dichotomy of staff perspectives a valuable insight which is a potential source of tension for teachers, which relates to exposure to the pressures of conformity to cultural and parental pedagogical expectation, eventually resulting in a possible deskilling of the practitioner over time:

> … we are quite distant and isolated from the … from the UK, and I think people even though they might not admit it, I think being out here you can become deskilled very quickly, you can actually lose err … your

> motivation to master teaching. I think that's the killer for a lot of people. 13(Staff).

7.6 Theme four – the impact of religion.

The emergent focus in this theme is a perceived cultural and social pressure to conform to a specific religious perspective, and that this strong expectation and pressure for orthodoxy seems to place constraints on the participant's ability to engage fully with specific aspects of the course relating to social, moral and ethical issues. There is also a sense that the encouragement of free thinking in these respects may be a source of tension and conflict. Several sub themes emerged which corroborate and clarify the emergent sub themes within the phase I data pertaining to the salient significance of religion within the participant cultural context, and the discomfort associated with thinking stimulated by the course that is perceived to contradict religious beliefs, together with a suggested difficulty encountered by participants in engaging with social, moral and ethical issues by virtue of such issues inevitably drawing upon their religious convictions.

The first sub theme emerged strongly and relates to the apparent *social and cultural pressure to conform to a particular perspective*. The essence of the tension here seems to be associated with participant's anxiety concerning what other people might think of them if they voice thoughts and opinions that conflict with the established societal norm. There is a suggestion that within society as a whole in this cultural context, people are reluctant to engage with thinking that might take them outside or beyond the expected norm:

> *Why do you think no one really discusses it (evolution)?* Because I think everyone has the same problem with … is this right or, you know, what if it's wrong, and what would this person think if I said that, especially if they're from the same religion or the same beliefs. They'd be like, oh how could you think such things, and I just … usually people just don't want to think about it. *OK. I'm trying to get at the reason behind why they don't want to think about it.* Probably because … I think, yeah, they're probably scared of what other people might think of them. *OK.* And what other people might say, and … I think by stating their opinion then they are

> showing who they are in a way, or how they think, and … yeah, it's all about I think, you know, what would this person say about me. *So what I'm getting there then is that you feel there's a cultural pressure and a social pressure …* Yeah. *… to conform to a particular point of view?* Yeah. 1(Student).

There is a feeling that attempting to explain a phenomenon beyond the accepted religious interpretation would muster great criticism, and upset the family. The family is central in importance within the Arabic culture, and so we begin to see the nature of the pressure to conform to a given notion and the sense of insecurity that stems from thinking outside the established boundaries:

> *And would you say that the majority of people here are stuck in a very traditional fixed interpretation of that revelation in the Quran … that God created mankind?* Yes definitely, err … and I'd say society as well. I mean they'd be seen as some kind of heretic or something if they suddenly started trying to explain it. They can't … it can't be explained, that's what … that's what they think … it's like magic kind of. *OK. So you think then that it's not just a religious issue, it's a cultural and traditional influence as well?* Yeah, it's social pressure … like, you'd probably upset family members and stuff if you don't conform and stick to the traditional way of thinking, because that's fixed. *Would you agree with me that … in saying that the social pressure here to conform to the norm is quite intense?* It is, very. 3(Student).

Once again the phenomenon of parental pressure emerges in this regard, together with a sense of tension in the teaching of controversial (in this social & cultural context) areas of the curriculum and the previously emerged suggestion of a sense of tension between teaching staff and the senior leadership of the school :

> *Where about in the course do you feel that you've experienced most tension in this aspect of HSW?* Yeah, two aspects. As I said stem cell cloning, but particularly discussing natural selection, which is on the syllabus, err … they find it very difficult to get their heads round it, but I try to keep it relaxed. I keep saying this is only a theory. I keep saying that

> because of … let's say parental difficulties, err … lots of parents might have … err … major views on this matter, and they come in and it makes life difficult as a teacher. In the end we have to teach it, simple as that … It doesn't help, does it, that parental influence, particularly in this school, is high. *Why do you think that's the case?* I think due to weak management at the top. They have given parents far too much power in terms of how teachers are dealt with, and that is certainly not a good thing. 9(Staff).

The second sub theme addresses the perception that ability to engage with social, moral & ethical issues is significantly compromised due to this pressure to conform. The essence of the tension again relates to a predilection to avoid discussing issues that are considered to be controversial, and an anxiety relating to how other people may view a person who engages with such controversial thought and discussion:

> *So given that status quo, do you feel that the religious perspective that the majority of people are brought up with here, compromises their ability to engage with certain ethical, social, and moral discussions?* Yeah. Because usually when people discuss, it's never to do with anything so serious or anything to do with err … like conspiracy theories. It's always gossip about other people or shopping or clothes or new restaurants opening, but nothing really educational or … yeah, it's trivial in a way. Nothing that really gets them thinking or just sharing ideas, and I think it's because of the whole, you know, worry of what people will think of them. 1(Student).

The notion that one must keep any ideas and opinions that might conflict with the established polemic to oneself emerges strongly:

> And if I'm not mistaken I don't think in Kuwait we're allowed to discuss evolution in schools. … we're in a country and we have to … work around that really. You can have your own personal opinion, your point of view, and not contradict theirs. 2(Student).

The sense that one must always guard what one is willing to say or discuss, together with peer and family pressure to be seen to conform, and that transgressing this expectation is likely to ferment dire consequences in terms of loss of peers and family respect and approval seems to be a significant source of tension:

> Like parental pressure as well, like they feel scared to say it or even go home and tell their parents what they learned. *What sort of things might happen to someone here who perhaps is thinking along more different lines and voices their opinions?* Err … I think it actually all depends on their nationality as well. If they're Kuwaiti there would be quite a problem, but for someone like me … I think if … if they are Kuwaiti then there would be a major problem. They would be seen as … *If they are Kuwaiti then there would be a major problem … is that what you're saying?* Yes there would, yes. *Right*. They'd be seen as going against their own kind and … yeah. *So … what might happen then in that situation?* Well what I'd say … in school probably they'd … they'd kind of be losing friends and stuff. And even at home I think their parents … it's just like I think they'd try to conform them and get angry basically, like: "Why are you going against us? We know what's right. 3(Student).

Finally within this sub theme there is a corroboration of the salient role of Islamic values within the culture, and an insight into how some participants attempt to reconcile the tension they experience when they engage with social, moral and ethical issues in the course. Specific examples that emerged include giving answers to examination questions that the participant thinks the examiner is looking for when in reality the participant actually disagrees with the answer he or she is giving; and secondly relating to the confusion experienced when conducting practical work that involves live animals:

> *Do you feel that … that society in general here in Kuwait, the culture, is strongly influenced by the Islamic traditions?* Yes … yes. *So would you … do you think that might actually be … make it more difficult for people in general, that are born and brought up in Kuwait, to actually engage with these ethical and moral issues, without involving religion?* Yes, it will be

> more difficult. Because like we've been raised on certain values, religious values, and don't … you come to school and there's another opinion, it will be more difficult, yes. *Right. OK. When there's a difficulty with this, what do you find … find yourself doing? Where there's a difficulty with engaging with, let's say just for example evolution … the theory of it and the evidence that's there … how do you react to it, what do you find yourself doing in order to be able to cope with the conflict?* Just learning err … just learning what we are … what's expected in the mark scheme, what's considered as right, and then just writing it to get it over with. Answer the question and then finish. I might believe something else, but I want the marks, I'm not writing anything else! *So what you're saying to me there is that even though you believe that what the mark scheme is requiring is wrong from your point of view, you'd still go ahead and write that because that's what you think is expected?* Yes, because I don't know if the other part will be … like considered … like they will give you marks for it. 5(Student).

Interestingly I came across an example of an examination question and marking scheme, where the participant did not conform to this notion and actually wrote an answer that truly reflected their religious conviction, risking not getting the marks because the mark scheme is not clear with regard to the expected answer. This example is included in appendix (6a). In this particular example, question 8(b) requires two ethical or social issues related to the use of genetic screening for genetic disorders. The answer given by the student is: "People argue that it is God's creation that no one should tamper with." When one examines the marking scheme, this answer does not clearly fit with any of the expected answers, it being unclear as to whether or not this perspective would be accepted under option 5 – "other social issues", and yet the answer can be considered to be entirely appropriate from the religious point of view and social and cultural perspective of the student sitting the examination paper. This example of a participant response to a past paper examination question exemplifies how their religious conviction can influence the answer given, and brings into question whether this answer is acceptable. There is no clarification of the issue in the extra guidance column.

Continuing with the experience of confusion when conducting practical work that involves live animals:

> *Discussions involving ethical, moral, and social issues inevitably draws upon my religious thinking (interviewer statement).* You mean it affects my religious thinking? *Err … your religious thinking affects your ability to engage in ethical, moral, and social issues.* Well … yeah sometimes because err … as in some topics, what we might learn in biology might be the exact opposite of what we know from religion. So this might create some confusion for me. *Could you give me an example?* Err … let me think … err … an example, or the experiment we did in AS biology … you explained it to us, the Daphnia experiment. We discussed the ethical issues of using Daphnia rather than other factors. So basically we're killing an organism which is err … not killing, we're torturing actually … and in our religion we're taught not to do that, so … *Right. So when it comes to you engaging with practical work that involves some kind of organism, that creates a kind of a conflict or a tension for you?* Yeah … because we're taught not to hurt any organisms. *So you would give the same value to Daphnia for example, a microscopic organism, as you would to a mammal?* Yeah, because they are a living thing, they have the right to live. 8(Student).

Sub theme three addresses the clear emergent *conflict that relates to the scientific evidence supporting the theory of evolution* with the predominant religious perspective. The essence of the tension inherent in this aspect of the course relates to several strands. Firstly there is a reiteration of the conflict associated with the nature of the thinking provoked by engagement with this aspect of the course. Secondly there is further corroboration of the tension experienced in the process of trying to resolve whether or not to discuss these thought processes with parents, family and friends. Thirdly a further example emerges relating to how some participants attempt to resolve the experience of this tension by apparently assigning less importance to the scientific evidence and instead focusing their thoughts on the wider religious teachings within Islam:

Discussions involving ethical, moral, and social issues inevitably draws upon my religious thinking (interviewer statement). Yes, because sometimes it's like you're in a debate with yourself. Err … because some … some things are logical or you have proof and evidence for them, and there's a trend showing, but then they … they don't follow with what your religion says, or even culture, you know … you … you believe, or you're supposed to believe, and that's where you get into an argument with yourself and try to come up with a logical reason to join the two or make sense out of the two theories. *Have you experienced any kind of tension with that?* Err … I think like … if … maybe with myself, just thinking about … let's say if you have two different theories that oppose each other based on your beliefs and the other based on science, and because they contradict, I think it causes … like sometimes if I'd want to say ask my parents or anyone, maybe a relative in the family, and they are supposed … would have the same beliefs, and they wouldn't discuss the topic, they would just … yeah, they would just come to conclusions with what they believe, because that's the only thing that's right. So there's a tension in I think when it comes to should I ask or should I just, you know, keep thinking to myself. *Do you experience any tension with the kind of thinking that being exposed to this kind of thing in the course invokes?* (Long silence) … *When you start to think about things, does that create a conflict or tension?* Yeah … it does because … like I said it could contradict so much and … and sometimes you might think what you believe isn't true, and that I think could cause worry to someone … just thinking of how can something not make sense, or how can that be? *Right*. And … for instance, evolution and how …. You can see a clear trend and pattern, and it's logical and makes sense, but then that's not what you're supposed to believe! So when the two things contradict, I think that causes a lot of tension within … yeah, within thinking about it. *A lot of tension?* Yeah … tension in the way … like … *Can you describe your experience of that tension?* Err … as in? *As in how does it make you feel? What sort of feelings do you get?* In science I think I feel that err … you know, just put everything to the side and come up with … it's not coming up with a different belief or anything like … I still stick with

> whatever morals I have and still believe in whatever I believe, but then when you think about it these things are just to do with science. They're the little things in life and they're not like … there are other points of religion that are maybe … more important maybe, things that you need to know that there is only one answer to, but then when it comes to this I think you can come up with your own theory linking the two, and that's … that's what I find myself doing lately. Err … like just forget everything, as long as they're faithful to whatever and you … you know, you believe in whatever, and all of that is set. Everything else then just comes in with linking the two and coming up with your own kind of theory. 1(Student).

There emerged a strong sense that the theory of evolution contradicts the religious teaching and that questioning this perspective creates feelings of significant discomfort:

> *Do you think that the theory of evolution is contradicted by religion, or is it simply a question of how the religion is interpreted?* It pretty much is. It is … it is both. It does contradict religion, it contradicts all religions because it says that people evolved from something, while religion says people were made or born as humans … And then there is science facts or scientific evidence that says it's true for example, while on the other hand religion contradicts the whole evolution. 2(Student).

The predominant Islamic perspective that seems to be held by the student participants relating to the creation and evolution is encapsulated in the following participant rhetoric:

> But in my opinion err … I would like to discuss … but I don't know if it would be accepted as a right answer or no … us we've been created by God and not by err … we evolved from a small cell, slowly. *What is your interpretation of your belief that we were created by God, how do you interpret that? I ask that question because I'm also Muslim, but there isn't a conflict in the evidence that's placed before me about evolution, and my interpretation of Islam. Yes, I believe that we were created by God, but it depends on how you interpret that. What's your interpretation of it?* Err … it's like we began from Adam, a single human, and not like from a cell. *So*

how did Adam … how was Adam created? Err … from … by God. *In what way, how?* I don't know (laughing). *What does the Quran say?* Err … he was created from the sand, from the earth, yes. *Right. So is it your interpretation that Adam was created by … somehow making a … a model if you like, out of sand or clay and then God breathed life into it, is that your interpretation?* That's what it says in the Quran. *I see.* Yes. *Right. OK. And err … that obviously conflicts with all the evidence that's being placed before you about evolution?* Yes. Err … I don't say like … things don't evolve, yes they do evolve, but we evolve … like in small things, not in like … from a cell to a human, not like this. *Right. Not even over millions and millions of years?* Yes. 5(Student).

So when you were presented with all of this evidence, does it not make you think about the possibility of the theory of evolution being … possibly fact? Well yeah it does sometimes but … as we're taught in religion there is no such thing as evolution. *This is what I'm trying to get at, because your religious background … or at least the way you interpret it, conflicts with the evidence for evolution that's put before you, and I'm just wondering what effect that has on you?* What effect? *When you just said to me the evidence you've been presented with makes you think, does that create any kind of conflict with the religious side of it?* Yeah it does. Conflicts with the religion and the evidence that we are presented with. *Could you describe that conflict to me a little bit?* You don't really know which one to believe. You either want to believe the religion that you've been taught for years or scientific information that you're given and the evidence. They're right in front of you so … yeah it does kind of conflict with each other. *Can you give me some kind of err … feeling for that experience that you had?* Feeling? *I'm trying to understand the tension that is evident in your discussions around the evidences that we've looked at for evolution, how that's conflicting with your religious upbringing. I'm trying to get a flavour of how that impacts on you.* Well it just makes me concerned about what I've been taught, so … *Concerned about what you've been taught?* Yeah. It makes me question the things I've been taught. It makes me want to get into more detail so I can understand

> what's happened, and to finally decide which one to believe, the process of evolution or religion. *Right, so are you finding that it's causing you to question your religion?* Yeah, sometimes. *Mmm, OK. And is that uncomfortable?* Yeah. 8(Student).

Whilst the experience of tension emerges very strongly with respect to the study of the theory of evolution, there is a suggestion that participants who have been exposed to a Western culture other than that of the Kuwait context do not actually experience any significant conflict with this issue even though their religion is Islam. The reasons given seem to be associated with a different way of thinking that is more open minded with a willingness to consider deeper and wider implications stemming from the evidence they are engaging with. The first participant in this example lived in England and went to school there for several years prior to coming to live in Kuwait. The second participant also spent a number of years in the UK and has a Kuwaiti father and an Irish mother:

> Err … well personally for me … my religious back ground doesn't really … I'm quite open minded, so … so I can see both side of an argument really. But I have to say I've met a lot of people here that … they are … have one way of thinking basically, and their religious views really affect everything … affect their views on everything. *Now that's interesting because you're saying to me there that by enlarge, in your experience, the majority of people here, the religious influence is quite significant in … in …* Very. *But … but for you … and I know that you're Muslim … it's not an issue. Now why do think that's the case for you?* I'd probably say it's tradition as well. My parents aren't Arabs, so we've not got that Arab tradition or anything, and we're not really traditional … at all. Like when we lived in England we were quite open minded as well. My parents always told me to look at both sides of an argument … I've been raised like that. *That's interesting. Can I just probe you a little bit … you know when we talked about evolution and we looked at the evidence for the theory of evolution from a molecular point of view, i.e. comparative DNA analysis, and from a physiological and morphological point of view, and from the fossil evidence?* Yeah. *Given that evidence placed before you … did it make you feel uncomfortable at all?* No … for me it didn't make me

> feel uncomfortable, err … because I look to science for explaining something and it made sense. So I found … I found I agreed with it … I think that's probably right, and … no it didn't make me feel uncomfortable at all. *How does that fit then with your … I'm interested in this because for the majority of people it makes them feel very uncomfortable … because it provokes … it provokes thoughts that take them out of their comfort zone, and they don't feel safe in allowing themselves to think along the lines that the evidence presented for evolution might actually be the case. Err … so how does that sit with … the Islamic teachings, for you, that God created mankind?* Err … well … I didn't … I did … (laughing). I think you can explain … you can explain it … I think science does explain it, and I just think personally that like it's unrealistic that we just appeared … just like that, fully. And I'm used to thinking outside the box, so it's … I would say it's more like a problem for me, like thinking about, you know, how it all fits. *Yeah. So what we're kind of touching on here then is … is … people's interpretation of the creation, yeah?* Yes definitely. 3(Student).

The second participant example makes reference to an ability to balance arguments and proposals through a process of consideration and thought rather than simply perceiving a conflict of dogma and remaining fixed and inflexible in their interpretation of that creed:

> Personally I felt no tension. It (theory of evolution) was something that you know, yes it's challenging because you're having to think about it more deeply than let's say someone who doesn't have … you know, the religious background I have. But then again it's being able to think outside the box and being able to trust your religious foundation … but also incorporate … you know the science as well. So I didn't feel any tension, you know, I felt more intrigued than tension because, you know, I'm learning every day and that's an aspect I'll continue to learn and … I know that later on I'll fully understand how I feel about it, but in the mean time I'll just keep on learning. *This one cropped up as a major issue for … probably about eighty percent of the students err … for them, and I'm interested that for you it's not an issue … not a major issue, and I'm wondering why that might be the case. What do you think?* Maybe

> because I'm influenced by two different cultures, you know, two different aspects … two different views you know, and I've learned to be able to keep them balanced throughout. And you know you have certain aspects of culture that clash with … you know, and vice versa, and it's being able to balance and make trusts in your own opinion at the end of the day, make your own judgments, and I think I'm used to that, so … that was just another … it was just another example of being able to balance between the two. 10(Student).

These two examples of rhetoric seem to lend some support to the notion that has emerged in this study, and which resonates with other studies in the field discussed in chapter three, that there are significant cultural differences in the Middle Eastern context that impact on approaches to learning, and that a knowledge and appreciation of these differences should be informing our attitude to curriculum change and intervention.

Finally there emerged a sub theme, though less strongly than the others, suggesting that *education that encourages free thinking is considered to be leading people away from their religion*. The experience of tension here seems to be linked to a sense of fear and anxiety that the thought processes stimulated by the HSW components may create doubt and confusion in the minds of students with regard to their religious conviction:

> … the problem which I think the country or the parents are worried about is the teachers who are convinced that evolution is true would convince their kids that it is, which would move them way from religion. … I think they … I don't know if it's them being threatened by it? It's not actually being threatened it's the fact that they are just worried or they don't wanna risk their kids drifting away. 2(Student).

7.7 General summary of the research findings

The nature of the tension apparent within the dynamics of transposing the HSW teaching and learning ideology from a Western contemporary cultural context into a Middle Eastern cultural context such as Kuwait seems to be focused within the main theme descriptors which emerged from the Phase I interview analysis,

and which formed the scaffold for the Phase II interviews. Analysis of the Phase II data brought more clearly into focus the emerging phenomenon.

7.7.1 Theme 1: Examination performance driven learning

The emergent focus in the examination performance driven theme seems to be associated with a tension surrounding the perceived salient importance of passing the examination and getting into university, together with a related parental pressure and expectation to do so.

This first theme of examination performance driven learning emerging from the phase I data is clearly corroborated in the phase II data. Three sub themes emerged: Firstly reiteration that passing the exam is considered to be the main aim by the participants. Secondly reiteration of the goal of getting into a specific university or profession. Thirdly reiteration of a sense of parental expectation or pressure.

The first sub theme of passing the examination being considered salient emerged strongly. There is some recognition that some skills development had taken place, but the students do not seem to empathise generally with the skills development aspects of the course in terms of achieving academic success. The development of skills was considered to be incidental rather than a carefully orchestrated outcome of the teaching and learning process. The teacher participants corroborated the dominant student perspective suggesting that there seems to be a prevalent narrow view of the purpose of education, and that the development of transferrable skills has a low priority.

The second sub theme, the goal of getting into a specific university or profession; again student's considered this as a major goal in their education, corroborating quite strongly the phase I data. What is interesting is the emergence of a suggestion that this relatively narrow view of the purpose of education may have links to a cultural influence and a preoccupation with status, whereby the majority of people in the Arabic context are less open to alternative ideas about teaching and learning (Hofstede, 2001; Williams, et al., 2001; Wilkins, 2002; Bridger, 2007; Al Harthi, 2010). Again the teacher participants

corroborated the narrow student perspective on the purpose of education with regard to this sub theme.

The third sub theme of parental expectation or pressure remained evident in the phase II interviews, though it did not emerge as strongly as in the phase I data. Interestingly though is the nuance that the experience of parental pressure and expectation to succeed academically and enter a high status profession has a possible cultural foundation to it. There is also a suggestion that this parental pressure and expectation may be related to cultural issues of status and saving face (Hofstede, 2001; Williams, et al., 2001; Wilkins, 2002; Bridger, 2007; Al Harthi, 2010). Generally there emerges a sense that this social pressure the students are subject to is a source of tension and this is corroborated by the teacher participants who feel that this evident parental pressure on the students and school may at times be unrealistic and difficult for the participants to live up to.

7.7.2 Theme 2: Preference for information (content) based learning

The preference for information based learning theme that emerged in the phase I data is clearly corroborated in the phase II interviews along with several emergent sub themes.

In the first sub theme, student's past experience of being used to learning factual information was strongly corroborated, together with a sentiment that education for understanding is a notion that has limited importance. Probing revealed different shades to the experience of tension amongst the participants. Firstly there is a perceived difficulty in engaging with the none factual aspects of the course, for example the overarching critical thinking, creative thinking, and flexible problem solving skills central to HSW. This is attributed to having not been used to engaging with such facets in the participants past experience. There is a perception that factual information based learning is preferred because it is considered easier to participate in, and a confirmation that in the Kuwait context information based learning is the predominant expectation for both students and their parents. There is a sense that this expectation of traditional teaching is where the students feel at ease, with a suggestion that attempting to change the education process from the traditional expectation of

what the participants and their parents are used to is a source of discomfort and tension when more student centered teaching and learning processes are implemented too quickly. Probing brought the nature of this tension more clearly into focus revealing sentiments of discomfort, confusion and feeling scared. Further corroboration of the student participant's fixation and anxiety associated with being able to perform in the examination emerged, grounded in the belief that they learn most effectively in terms of being able to get high examination grades through traditional pedagogy.

The second sub theme of a parental expectation of traditional teaching and learning emerged very strongly, and probing revealed several strands of sources of tension. There is a student perceived lack of appreciation regarding the parental lack of empathy relating to the importance of understanding in the learning process, and that it can take considerable time for understanding to occur in order for learning to be facilitated. In particular where there is a conflict of understanding on this issue between the parents of a student, this can be a source of tension and confusion. A further strand within this sub theme is the notion that this parental pressure for traditional teaching and learning may have its origins partly in the past learning experience of the parents themselves, who are perceived to have largely been exposed to a factual based learning process. There is a perception that the parents generally do not empathise with the 'learning for understanding' approach and that they are a source of pressure on the teachers to teach in a traditional way, threatening to withdraw their child from the school if their concept of good teaching is perceived not to be taking place. This insight of the parental expectation being influential enough to impact on the teaching and learning methodology is also corroborated by the teacher participants. Of particular interest is the perception that the tension experienced by relatively new young teachers from the UK can be sufficiently uncomfortable that they leave the school rather than compromise their ideals regarding what they consider to be good practice. Finally within this sub theme emerged a sense of conflict between the staff and the senior leadership team in terms of differences of opinion about what constitutes good practice in pedagogy and to what extent we should be accommodating the cultural expectation in the Kuwait context.

The third sub theme of an evident desire to get the information in order to succeed in the examination corroborated much of the sub themes on information based learning in the phase I data. Probing revealed three interesting strands within the sub theme. Firstly reiteration of the perceived importance of simply getting the facts and a sense of feeling comfortable with just getting the facts, implying possible discomfort associated with education that tries to do more than this. Interestingly though is the recognition by some participants that there may be a better way of teaching and learning other than the traditional methods they are accustomed to. Secondly there is a sense of time being a constraint on doing anything beyond simply getting the information, corroborated from the phase I data. This relates to the shorter academic year in Kuwait in comparison with the UK. Thirdly there is a flavour of the dichotomy of pedagogy within the teaching staff creating a source of tension by virtue of the more traditional teachers valuing factual information based learning in opposition to those staff who do not value the traditional approach and seek to impose more contemporary methods in the belief that such methods are “best practice” regardless of the cultural context and expectations.

The importance attributed to passing the examination and the perceived pressure from parents to succeed academically emerged again as it did in theme one, and has already been considered in the theme one discussion, further corroborating the tension, inherent in these phenomena, from the phase I data.

The final sub theme of education for understanding is of limited importance addresses the evident lack of appreciation for modes of teaching and learning that place emphasis on understanding as distinct to factual recall. Within this sub theme is a suggestion once again that this attitude to education may have a cultural foundation to it.

7.7.3 Theme 3: Reaction to and perception of How Science Works

The emergent focus of theme three in the phase II data substantiates the same theme in the phase I data. There is a perception that HSW is culturally and environmentally biased toward students who live in the UK where its conception and development took place, creating a sense of disadvantage for students in

the Kuwait context. Several sub themes emerged and probing brought the theme more clearly into focus.

The first sub theme centers around issues associated with the wording of examination questions and a sense of lack of clarity in the minds of the participants as to what the examiners are actually looking for in student's answers. This perceived ambiguity is corroborated by the teachers, though participants found it difficult to illustrate their concern with specific examples. The tension associated with this phenomenon seems to be linked to a belief that this vagueness makes it almost impossible to obtain full marks for a question even if the participants are confident that they have mastered the relevant information. Again this experience of tension resonates with previous participant concerns in the phase I and II data about being able to perform well in the examination.

The second sub theme is associated with a perception that there is an assumption by the examiners that students are based culturally and environmentally in the UK. Three strands emerged during probing. Firstly there is a sense of compromised ability to engage with aspects of HSW such as field studies, because the Kuwait environmental context is considered to provide fewer opportunities in comparison with the rich environmental context of the UK. Secondly there emerged a sense of tension relating to field work associated with the cultural restriction where boys and girls are not expected to mix, and an attitude toward such practical field work that places low value on it in terms of its facilitating passing the examination, thereby compromising the student's ability to achieve academic success. Thirdly there is a perception that attitudes toward social, moral and ethical issues are significantly dependent on which part of the world you have been brought up in, and so when faced with examination questions that have been devised in the UK social, moral and ethical context, this dynamic impinges on participant's ability to engage with the question. The third sub theme highlights a perceived parental and cultural influence on student engagement with HSW. On the one hand there is a suggestion that there may be a cultural impact which depresses individual motivation to express their point of view, thereby compromising engagement with discussion and debate, and possibly creating conflict within the group when individual perspectives are aired. On the other hand a sense of fierce competition emerged where parental anxiety

for their children to succeed academically merges with a perception that there is a very real fight for survival taking place in this cultural context, resonating with the importance of status and academic success and lack of appreciation for skills based learning and its contribution to success previously discussed.

The final sub theme relates to the suggested prevalent narrow cultural perception that education is just a means to an end, and that HSW is considered largely irrelevant to the participant's main objectives. This sub theme resonates with the sub theme of education for understanding being considered of limited importance that emerged in theme two of the phase II data. There is also a sense of antipathy from the teacher perspective where contemporary notions of teaching and learning are perceived to be being imposed on a different culture of learning preferences and expectations. There also emerged from within the contrast of staff pedagogical perspectives a potential source of tension for teachers, which relates to exposure to the pressures of conformity to cultural and parental pedagogical expectation, eventually resulting in a possible deskilling of the practitioner over time in terms of what constitutes best practice in the UK context, although there is some evidence in the rhetoric of UK government ministers previously discussed in chapter (four) that the winds of change are now beginning to re-embrace more traditional approaches and attitudes to teaching and learning.

7.7.4 Theme 4: The impact of religion

The social & cultural pressure to conform to a specific religious perspective, and a strong expectation and pressure for orthodoxy is the focus of this theme. This pressure for conformity seems to place constraints on the participant's ability to engage fully with specific aspects of the course relating to social, moral and ethical issues. The sense of tension centers around the encouragement of free thinking in the HSW aspects of the course, which creates internal conflict. The prominent significance of religion within the participant cultural context is further corroborated. The conflict associated with free thinking stimulated by the course is strongly perceived to contradict religious beliefs. This conflict seems to be a further barrier to engaging with social, moral and ethical issues because religious

convictions in this cultural context are inevitably drawn upon in the process of such engagement.

The first sub theme of pressure to conform to a particular religious perspective emerged strongly. The essence of the tension in this sub theme relates to an anxiety concerning what other people might think if thoughts and opinions that conflict with the expected norm are expressed. The suggestion emerges that within society as a whole in this cultural context, people are reluctant to engage with thinking that might take them outside or beyond the expected norm where religious implications are concerned because of a fear of reprisal. The notion of family being of prime importance within the Arabic culture is corroborated, and great caution is exercised to avoid family disapproval. Accordingly there is a reluctance to be seen to engage in any kind of discussion that might try to delve more deeply and seek further explanation beyond the accepted religious interpretation. Further corroboration of the impact of parental expectation and pressure emerges, but in this context takes the form of a sense of anxiety for the teachers when they are placed in a compromised position where they are required to teach a specification that contains controversial material, making teachers feel vulnerable to possible reprisal.

The second sub theme explores in greater depth the suggested compromised ability to engage with social, moral & ethical issues due to this pressure to conform. The essence of the tension again relates to a tendency to avoid engaging with issues that are considered to be controversial for fear of how this might affect others opinions of those who do so. This notion of keeping ideas and opinions on controversial matters private emerges strongly. There is further corroboration of the salient role of Islamic values within the culture, and an insight into how some participants attempt to reconcile the tension they experience when they engage with social, moral and ethical issues in the course.

The third sub theme relates to the perceived conflict between the scientific evidence supporting the theory of evolution and the predominant religious perspective. There is a conflict experienced by participants which relates to the nature of the thinking stimulated by engagement with this aspect of the course. Further corroboration of the tension experienced in the process of trying to

resolve whether or not to discuss these thought processes with parents, family and friends is evident, and a further example emerges illustrating how some participants attempt to resolve the experience of this tension. There emerged a strong sense that the theory of evolution contradicts the religious teaching and that questioning this perspective creates feelings of significant discomfort. Of great interest and significance is a suggestion that participants who have been exposed to a Western culture other than that of the Kuwait context do not actually experience any significant conflict with this issue even though their religion is Islam, with suggestions that such individuals exemplify a different way of thinking that is more open minded with a willingness to consider deeper and wider implications stemming from the evidence they are engaging with and a greater ability to take a more balanced perspective, lending some support to the notion that has emerged in this study, and which resonates with other studies in the field discussed in chapter three, that there are significant cultural differences in the Middle Eastern context that impact on approaches to learning, and that a knowledge and appreciation of these differences should be informing our attitude to curriculum change and intervention.

Finally there is a suggestion that there is an element of tension linked to the encouragement of free and critical thinking stimulated by the HSW components related to issues of religious doctrine. There seems to be a sense of fear and anxiety that these thought processes may create doubt and confusion in the minds of students with regard to their religious conviction, and result in the estrangement of people from their religion.

7.8 The peer review analysis.

The level of agreement between the researcher and the independent peer reviewer is reasonable in terms of the reviewer recognising the emergent themes as being congruent with those recognised by the researcher. All the main emergent themes were agreed with. With regard to the sub themes within each main theme, fourteen out of the twenty one emergent sub themes were recognised at a threshold of 40% or above. This represents a 67% level of congruence. The smallest variance occurs in the two sub themes of getting into university and a profession being imperative, and the religious perspective being

the only perspective that is considered to be correct. The ***greatest*** levels of **recognition** of sub themes by the reviewer and researcher together occurs in the following six sub themes:

Sub Theme	**Researcher**	**Reviewer**	**Variance**
Main driver for students is exam orientated	89%	67%	+11
Performing well in the exam	67%	100%	+33
Parental expectation of traditional T & L	100%	78%	-22
Used to factual information based learning / Difficulty with new methods of T & L	89%	67%	-22
Social & cultural pressure to conform to a religious perspective	89%	67%	-22
Compromised ability to engage with social, moral & ethical issues	89%	67%	-22

Levels of **disagreement** between the researcher and the reviewer occur in the following seven sub themes at the 40% threshold, although the variance is relatively low (-11) in three of these:

Sub Theme	**Researcher**	**Reviewer**	**Variance**
Exam related parental expectation pressure	44%	33%	-11
Discomfort with some parts of the Course	44%	22%	-22
Desire to just get information	78%	22%	-56
Education for understanding of limited importance	44%	33%	-11
Parental / cultural influence on ability to engage with HSW	44%	33%	-11
Narrow cultural perception of education / HSW irrelevant	44%	22%	-22
Education & free thinking leads people away from their religion	44%	22%	-22

Given the mean variance of -13.4 across all sub themes, generally speaking there is a reasonable level of agreement between the researcher and the peer reviewer. One might expect this slightly reduced level of recognition in the independent reviewer analysis, which may reflect the researchers' own bias and

personal interest in the focus of the study. In this respect the independent review process can be considered to moderate the overall analysis, and to improve the reliability and validity of the analysis procedure.

CHAPTER EIGHT

CONCLUSION

8.1 Strengths and limitations

Qualitative research methods may illuminate useful information about children's learning experiences, but phenomenology enables the researcher to focus on a very specific question or group of questions. My study was able to home in on a particular aspect of the science curriculum experience, which was HSW.

The methodology and method or instrument of data collection facilitates the expression of participant experience, thereby enabling the researcher to reveal the essence of the participant lived experience in their learning process (Wilding & Whiteford, 2005). In this way important information can be gathered and reflected upon which might be useful in deepening our insight and understanding as educators about the lived experience of children in different social and cultural contexts. The phenomenon that reveals itself may provide insights into educational experiences that allow a totally new perspective, which in turn might facilitate better provision for learning that is more meaningful, where the curriculum and pedagogy take fuller account of cultural differences. Phenomenology makes use of face to face interviewing techniques. This has the potential to produce rich in depth and nuanced data if done well (Rubin & Rubin, 2005).

Whilst there are different schools of thought amongst phenomenologists, the Heideggerian approach adopted in my methodology requires an interpretive perspective on the participants' lived experience. This presents a problem because inevitably as a researcher I will have brought to the interpretive process my own horizon of experience. Heidegger argued that it would be inappropriate to try and disregard or temporarily put aside these presuppositions based on our own experiences, precisely because it is not possible to fully do so (Rubin & Rubin, 2005). This leaves my study in a situation where the data from my research must inevitably be "contaminated" by my own presuppositions and prejudices which will have affected my interpretation of the interview transcript narrative. Not only is this the case with the narrative, but also during the interview process, since I will have adopted a slant of pursuit during probing

which may well have been informed by my own prejudice through my past horizon of experience. This is why I felt that it was important to make my own positionality more transparent in the thesis. Phenomenology cannot therefor claim to produce “scientific” data in the sense that such data can be demonstrated to be objective and trustworthy in the quantitative tradition. My interpretation of the lived experience of tension in this study will have been coloured by my own past experience and positionality, through which the reader must understand the context of that interpretation.

Having placed a question mark over the validity of my interpretation, this raises further questions. That is, how well do I speak for the participants in my thesis? Can I claim to truthfully and with integrity, represent their lived experience? Am I speaking for the participants in my study, or at some level am I speaking for myself? Of course during the process of interviewing, and later during the process of interpretation, I was mindful of being careful to try and understand what the participants were actually saying, and not what I thought they might be saying. However, I think it is reasonable to assume that the achievement of objectivity and detachment cannot be complete, no matter how thoroughly I may have tried to maintain integrity.

In the cultural and social context of my study, I do believe there may also be an issue around English as a second language for many of the student participants. They were trying to communicate their thoughts, feelings and experiences, but not in their first language, Arabic. As a consequence the lived experience of tension may not have been expressed as eloquently as the participants would have liked. This issue might be resolved within phenomenological interviewing by using interpreters and conducting the interviews in Arabic in this cultural context. Furthermore, cultural differences may have some bearing on how participants interpreted questions and answered them in my interviews. In this regard I reiterate the important insights Hofstede (2001) provides (chapter three) when discussing the differences between collectivist and individualistic cultures, and the readiness with which participants might be willing to engage with the interviewer and divulge information. Related to this concern is the power dynamic between researcher and participant. The participants in my study were used to relating to me in the work context as an authority figure (Head of

Department) and as such may have been guarded in what they were willing to say to me, and how. How could I tell whether or not participants were saying things to me that they believed I might have wanted to hear, in an effort to avoid tension or possible conflict and repercussion? As Hofstede (2001) reminds us, participants may not have given an entirely truthful account of their learning experiences, because in the context of my study there is evidence to suggest that in the Arabic collectivist culture avoidance of conflict could have been important in an effort to maintain harmony.

This study is small in scale and serves the primary purpose of educating the author in the process of educational research facilitating a scholarly contribution to knowledge. Whilst the number of participants for such a study is acceptable, it is not possible to make generalisations from the findings beyond the school and key stage level that is the focus of the study. Furthermore the interpretation of the participant narratives is essentially subjective, though processes within the phenomenological method attempt to increase the validity of the findings and limit researcher bias. As has previously been contended, the study merely provides a plausible insight into the nature of the lived experience of tension in the context of the study. However, the focus of the study has previously received no scholarly consideration in the school or Kuwait context as far as the author is able to ascertain, but does resonate with limited research in the wider Middle Eastern context. A plausible insight into a phenomenon derived from demonstrable scholarly research carries more weight than conjecture based on nothing more than opinion or personal preference.

8.2 Contribution to knowledge

This work has added a new empirical study to the field of scholarship of international schools. A novel aspect of this study, as far as the author is able to ascertain, is the methodological approach using phenomenology to research the lived experience of tension relating to the import and implementation of Western notions of teaching and learning in the Kuwait cultural context.

The study has also made a contribution to methodology through the deployment of a novel phenomenological approach to this particular topic and setting. My study has adopted a distinctive amalgamation of approaches advocated by

Rubin & Rubin (2005) and Bevan (2014). Rubin & Rubin advocate a semi-structured protocol consisting of a balance between main questions, probes, and follow up questions. Bevan (2014) suggests a specifically phenomenological structure, which has been incorporated into the interview structure, where the Epoche or Phenomenological Reduction (attitude) of the interviewer is given greater emphasis during the interview rather than only at the data analysis stage.

The findings of this study are unique to the particular school in which the research took place in the Kuwait context. These have been discussed at length in chapter six and seven. In summary there is a strong suggestion that students are used to a teaching and learning style which is information-based rather than skills-based, and a predilection for obtaining information in order to pass the examination. The pedagogical approach in Kuwait has been quite traditional for many years, particularly in the state schools. The research findings indicate quite clearly that participants have been well used to the more traditional teacher centered didactic approach, and that there is a sense of significant tension experienced when they are confronted with alternative student centered approaches.

A significant factor seems to be the lack of importance attributed to the notion of education for understanding in this cultural context, which underpins the HSW ideology. The research findings indicate that the predominant notion of education in this cultural context is one of acquiring a sound foundation of factual information. There appears to be little interest in the idea of developing an understanding of transferrable skills that might be useful in helping to use an acquired factual knowledge base to solve problems in unfamiliar situations. This is apparent in both parents and students.

A very strong influence on the teaching and learning status quo that emerged in the findings is the perceived pressure brought to bear on the school as a whole and on individual teachers by parents, who seem to have expectations of a more traditional teacher centered, information based teaching and learning style, and who may have little or no understanding or experience of the notion of student centered and skills based teaching and learning. This parental expectation was found to translate into a tangible pressure on the school, and was sufficiently

tenacious enough to impact on teaching pedagogy, acting as a counterbalance to the more progressive contemporary ideas that some staff have attempted to implement.

There is an undercurrent which suggests that certain aspects of the HSW elements of the course are perceived as unnecessary or irrelevant and serve to encumber or introduce an element of unnecessary discomfort into the process of studying in order to pass the examination.

The strong focus on a perceived need to pass the examination with a high grade and get into higher education appears to be linked to a cultural sensitivity related to issues of status in terms of future occupation and standing in the community. This need to succeed academically and ultimately socially appears to also have a strong parental driver, and may also compromise the ability of some students to engage productively with the HSW components.

There is a suggestion that students in the Kuwait cultural context are disadvantaged in the examination because of the HSW components, partly due to a perception that these components make an assumption that the students are living in the UK or a Western social and cultural context, and partly owing to the fact that students in Kuwait have less opportunity for exposure to the cultural and natural history environmental experience that for example UK students would have. There is similarly a strong indication that students experience difficulty accessing examination questions related to language issues of a perceived vagueness and ambiguity in the wording of the questions, which has its root not only in English as a Second Language but also in alternative cultural interpretation in terms of expected emphasis in the expected answer.

A major theme emerging from the study is a sense of tension relating to the community religious thinking. The dynamics of this tension encompass several strands.

Firstly there is a acuity among the students that the scientific evidences they are exposed to in the course may conflict (in their opinion) with their religious convictions (for example in the theory of natural selection and evolution of species). The tension in this particular strand of the dynamic seems to be

focused on the discomfort experienced by the students, created by the thought processes stimulated by this aspect of the course, where there is a disjunction between what they have been brought up to believe in a particular way, and the evidence they are presented with.

Secondly the social and cultural pressure to conform to the religious perspective of the wider community seems to be perceived as very strong. Any kind of individualism in this respect is not tolerated. This goes as far as restricting teachers, making it a penal offence to discuss religion or politics with the students (which technically makes this study illegal in Kuwait). This outlook naturally compromises the ability of both students and staff to discuss social, moral, and ethical issues, since such discussion draws upon the religious thinking of the individuals concerned.

Thirdly there is a significant theme emerging within the religious dynamic where the predominant religious thinking in the community is considered to be the only perspective that is right. This therefore restricts free thinking and contributes to the tension that students experience when they are required to engage with HSW components such as discussions and presentations relating to for example evolution (which incidentally is a topic that is technically forbidden in schools and universities in Kuwait).

Finally there seems to be a perceived fear of free thinking in the religious domain within education because there is an anxiety that such free thinking might lead people away from their religion.

All of these findings, which seem to form the essence of the tension experienced in the context of this study, might realistically be considered to have a detrimental influence on any attempts to introduce a Western model of teaching and learning such as HSW into an entirely different cultural context.

Given these findings and the nature of the proposed contribution to knowledge that this study makes I would suggest that this work, notwithstanding its limitations, makes a valuable input to the construction of an informed scholarly platform from which the process of curriculum change and pedagogy within the

school in which the study took place, and in the wider Kuwait context, might proceed.

8.3 Recommendations for policy and practice and for future research

The author contends that there is sufficient evidence in the field to warrant this research study in the first place, and that the findings provide a warrant for further research of a wider scope in design, incorporating several schools in the Kuwait context and larger numbers of participants. A research study on such an envisaged scale would require a team of researchers, and would begin to provide a plausible insight into the phenomenon of tension inherent in the process of educational change in Kuwait, that could possibly be generalised. Specific areas that have emerged in this study that might benefit from further research include:

(i) The apparent lack of importance attributed to notions of education for understanding in this cultural context.

I would suggest that most Western practitioners might consider education for understanding as important, because this empowers the individual to be more innovative and creative in the use of their knowledge. Why is it that in the social and cultural context of this study, such a notion appears to have little support? The issues surrounding the suggested inappropriateness of importing Western Curricula into a different social and cultural context discussed in this thesis are pertinent to this question. Understanding the reasons for this apparent dissimilarity in the reception and valuing of a pedagogical approach in the Arabic context compared to the Anglo-American context might be useful in terms of informing policy borrowing and implementation. A phenomenological methodology could be envisaged to provide an insight into this disjunction where the focus explicitly seeks to understand the stories people have to tell about *why* they feel uncomfortable with a particular pedagogical approach rather than seeking to understand the inherent experience of tension as such. To a certain extent my study has touched upon the question of why, but I feel had the potential to delve deeper using more focused probing. One approach to this that might reveal useful insights, could be similar to Ball's discussion (Ball, 2008) looking at how and why the interpretation and implementation of policy changes

in subtle ways as it cascades down the levels of authority to the classroom. This question might be investigated either at the school level from policy conception at senior leadership level, through Heads of Departments to subject co-coordinators and then to class teachers. Alternatively the process might be investigated from Government and Ministry level through to school higher management. Or the entire process could be investigated from Government to classroom.

(ii) The apparent sensitivity relating to issues of future occupation status in this cultural context.

This study brings to light a significant preoccupation with status, not only in the context of the research but also in the wider contemporary Arab cultural context. Given the fact that a gradual transition to a post oil economy with far fewer expatriate workers is anticipated over the next twenty five years or so, who is going to do the less prestigious jobs in the community? Realistically one cannot envisage a society where Kuwaiti nationals occupy ***only*** managerial positions, but are not found working in the less prestigious occupations that make up the larger part of the job market. This issue seems to be an important one to try and understand given the economic trajectory of Kuwait. Again, phenomenology has the potential to increase our understanding of the reasons for the importance of status in the Arab cultural context, by focusing on the lived experience of how people manage their lives in order to deal with the specter of possible perceived social failure or the elation of perceived social success in terms of occupational status.

(iii) The suggestion that HSW places students in the Kuwait social and cultural context at a disadvantage in examinations.

This study suggests that the HSW components of the A-level biology curriculum might to some extent compromise candidates' examination performance. Research could be useful that addresses the issues of examination questions apparently making the assumption that candidates are culturally, environmentally and linguistically based in the UK. This issue could be investigated by randomly sampling examination questions over a period of several back years. The

sample might then be studied to see how often allusion is made in questions to the UK social, cultural and environmental experience.

(iv) The community religious thinking and how this impacts on student ability to fully engage with Western conceived curricula and contemporary pedagogy.

This study has highlighted the significance of the religious thinking within the Kuwait and wider Arab social and cultural context. The impact of this issue and how this interfaces with students' ability and motivation to engage with aspects of the curriculum such as natural selection and evolution; comparative DNA analysis; and ethical, moral and social issues relating to scientific advances in society such as genetic engineering and medical genetic screening, needs to be better understood. This will contribute to our overall understanding of what constitutes appropriate and inappropriate curriculum interventions and reform in the Kuwait and Arab social and cultural context.

The research findings of my study, together with the wider literature in the field suggest that the contemporary popular practice in International Schools of adopting and implementing developed Western curricula may not be entirely appropriate. Where Western curricula are adopted, they should be implemented with a full and proper adaptation to the predominant host culture and sensitivities. Frequently this important consideration appears to be acknowledged in school policy, but it is questionable as to how thoroughly this acknowledgement is put into practice. It is also questionable as to how comprehensively curriculum innovators in International Schools understand and appreciate the social, cultural, and religious sensitivities of their locale, given the predominant Anglo Western background of their staff and management.

I would suggest that given the historical importance of Arab contributions to our scientific knowledge heritage that occurred during what is known as the European Dark Ages between the eighth and fourteenth centuries, we should make an effort to include reference to this in our curriculum innovations in the Middle East context. The curriculum needs to be socially and culturally relevant to the host society if it is to be engaging and motivating, and any reference to

historical contributions that might foster a sense of pride and dignity within the host culture should be encouraged.

Of equal importance to the relevance of curriculum content, is the issue of process. Different ideas about teaching pedagogy have been highlighted in this study as a source of tension. It has been suggested in this study that predominant contemporary notions of pedagogy which have evolved in Western cultures, are not necessarily universally applicable across the globe. Different cultures have different preferences for ways of knowing, and what is valued as knowledge. In our efforts to improve teaching and learning we should not marginalize the pedagogical preferences of the host culture, but ensure that full and proper account is taken of it.

8.4 The research question in the light of issues relating to globalisation and the knowledge economy

The notion that contemporary Western conceived ideas about how teaching and learning should take place, being universalistic in their application across the globe is challenged. Such neoliberal ideology has a strongly suggestive link to political intervention in education that seems to have a great deal to do with knowledge economy development and a human capital resource associated with economic competition. The link to demonstrable educational research as the driver for such T & L initiatives, associated with hard evidence as to how children learn effectively seems to be much weaker. There is also the question of what constitutes appropriate knowledge, and who decides this important issue. It is suggested that whilst intrinsic educational influences have contributed to what constitutes and is valued as contemporary knowledge determination, this thesis discloses a significant instrumental political influence operating on that process as well. Given such political impact on education and its development, and the seemingly predominant Western cultural background to educational interventions, the question of cultural relevance becomes important. There is evidence in the scholarly literature that suggests a detrimental cultural dissonance where neoliberal interventions are imposed upon different cultures around the world. This study supports some of the literature relating to the Middle East, and gives a plausible insight into ways in which Western curriculum and T & L initiatives in the Kuwait context may not be wholly appropriate to the

host culture. Whilst it is often acknowledged that the curriculum needs to be culturally relevant, though often it is not, the concept that the actual processes of T & L are often assumed to be universally applicable when perhaps they are not, seems to be less well accepted and understood. This notion of course is extremely delicate because an appreciation of it requires that the practitioner has a deep understanding of the relevant host culture and is able to facilitate such appreciation through a process of diminishing the influence brought to bear by their own cultural origins.

The study serves to highlight some of the potential problems the school and the wider community in Kuwait might encounter if it attempts to lift Western models of teaching and learning wholesale into the curriculum and policies, without due consideration of the cultural differences into which such models are being transposed. This is especially critical where the teaching staffs are inexperienced or lack experience of the Middle Eastern context. The nature of the tension emerging from this study might arguably compromise the success of unwitting attempts to change the way in which teaching and learning is conducted in Kuwait, and may not necessarily result in the intended outcomes commensurate with Kuwait's transition to a post oil economy. The instrumental political drive to reform education because education is identified as pivotal in knowledge economy development needs to be approached carefully, and needs to be informed by the research in the field. The motivation for education reform in the developing world should go beyond the desire to be seen to be aligning educational practices and curricula with contemporary Western notions of teaching and learning. Proper and full account of the local cultural sensitivities and preferences needs to take place, so that policy borrowing practices may be appropriately modified. This study, along with the related literature in the field suggests that significant detrimental tension is evident in schools when curriculum and pedagogy reform lack understanding and appreciation of the different ways of learning valued by different cultures, and their particular preferences. What is valued as good teaching and learning varies enormously between different cultures, and should not make the assumption that contemporary Western notions of teaching pedagogy and curriculum content are the bench marks for educational practice that should be aspired to.

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Appendix 1.

This appendix gives examples and citations from the Kuwait Schools Handbook for the company that owns the school in which this study was conducted, and its sister schools, with the intention of giving some insight to the reader regarding the importance of religion and local culture and ethos in the cultural context of Kuwait.

Restrictions and code of conduct:

"Members of staff are warned that, Kuwait being a conservative orthodox Muslim country, all religious and political discussion of any nature whatsoever with students is strictly prohibited. It is recommended that staff take careful note of this restriction. Violation will be construed a penal offence. Please see text of relevant law reproduced below:" (Kuwait Schools Handbook, 2014 p47.)

Article 23 of law number 3 of the year 1961:

"Disparagement of Almighty Allah, the Prophets or the companions of the Prophets is prohibited whether by protesting, challenging, mockery, vilification or by any other means of expression as provided for in Article 29 of Law Number 30 of 1970, amending certain provisions of the Penal Code Number 16 of 1960." (Kuwait Schools Handbook, 2014 p47.)

Religion:

"Kuwait is an Islamic state … For most newcomers, their first awareness of Islam will come as the dawn prayer rings out across the city in the small hours, the first of five calls to prayer each day." (Kuwait Schools Handbook, 2014 p13.)

"There are five pillars of Islam … profession of faith: There is no other god but God, and Mohammed is the messenger of God … prayer … fasting during the holy month of Ramadan … giving of alms … pilgrimage to Mecca." (Kuwait Schools Handbook, 2014 p13.)

“It is important to note that during Ramadan non-Muslims are also forbidden to eat, drink or smoke in public and that this is upheld by law.” (Kuwait Schools Handbook, 2014 p14.)

“During Ramadan business hours are usually adapted. Public holidays are usually associated with the Islamic religion and are a time for celebration.” (Kuwait Schools Handbook, 2014 p14.)

“Islam forbids the consumption of alcohol and pork products of any kind and these commodities are therefore illegal in Kuwait.” (Kuwait Schools Handbook, 2014 p14.)

Clothing:

“… women who wear skimpy or revealing garments will provoke unwelcome interest. Scruffy clothing may also cause offence. It is normal in Kuwait to dress smartly and to maintain high standards of personal hygiene. During working hours TES staff are required to dress formally and conservatively and to maintain the highest standards of grooming.” (Kuwait Schools Handbook, 2014 p15.)

The company Vision:

“Well educated generations brought up on morals, values and ethics who can lead the change in their community to a brighter future.” (Kuwait Schools Handbook, 2014 p2.)

The company Mission:

“To ensure academic excellence achieved through innovation, leadership, distinguished morals and ethics.” (Kuwait Schools Handbook, 2014 p2.)

Other:

“In the Secondary school, students are taught in segregated classes …” (Kuwait Schools Handbook, 2014 p5.)

“The vision of the school was to create a synergy between modern, western education with Islamic values and Kuwaiti traditions … the founders believed that the most successful way to provide the best (Western) curricula to the children of Kuwait was to base it in their own culture and ethos.” (Kuwait Schools Handbook, 2014 p7.)

Appendix 2

Appendix 2

Teaching and Learning Policy

Vision

Our shared vision of the is of a school that develops lifelong, well-rounded learners who possess moral conviction, social compassion and achieve their potential in all areas of their schooling and take their place in a global society.

Our Mission:

To provide the highest standards of British Education, within an Arabic Culture and International environment.

Teaching and Learning is central to our work as educators. At we aim to create a learning environment that takes into consideration the educational needs of all our students, that is based on mutual respect and on setting the highest standards of behaviour for learning for all our students and the highest standards of teaching for our staff.

This policy seeks to clarify what we see as best practice in teaching and learning, given the social, cultural and religious circumstances within which we operate. This Teaching and Learning policy lays the foundations for the whole curriculum and along with our Behaviour Policy, forms the context within which all other policy statements should be read. It is written for the benefit of all members of the school community to ensure that all are aware of the fundamental principles underpinning our work.

CONTENTS:

Appendix List:

- **Appendix A –** Formal lesson plan
- **Appendix B** – Evidence of planning format
- **Appendix C** – Protocol for lesson observations at
- **Appendix D** – Formal Lesson Observation sheet

1. GUIDING PRINCIPLES

To ensure our mission statement and cultivate our vision, staff and SLT at the guide their practice on the following main principles:

- Teachers enhance their effectiveness when their teaching is purposeful, efficient, clear, structured and adaptive to the learning needs of our students.
- High expectations of work and behaviour are very important in achieving high learning outcomes and in enabling our students to achieve their best.
- Effective teaching and learning happens in a friendly, relaxed, clean, purposeful environment. A range of strategies should be used to achieve this goal (including fair discipline, positive reinforcement, explicit and regular formative feedback, thorough preparation of lessons)
- Practice should build upon and expand teachers' repertoire of teaching strategies and techniques, including assessment for learning, independent and collaborative learning. We do not simply teach knowledge, but empower our students by teaching them how to learn.
- Best practice actively promotes the development of literacy and numeracy across the curriculum
- Best learning bridges the gap between knowledge and understanding and the ability to carry out practical tasks both in subject specific contexts and in cross-curricular activities.
- All teachers are learners, demonstrating this by example. Therefore, professional development is essential in supporting all teachers to develop their own learning.
- Teachers take an active interest in and responsibility for developing their teaching practice and are actively supported by the school to do this.

In addition, School expects students to have:

- ✓ A commitment to their own learning.
- ✓ A commitment to working independently, in pairs and in larger groups.
- ✓ A courteous and co-operative conduct towards others.
- ✓ A respect for all materials and resources.
- ✓ A willingness to seek, accept guidance or help and act on the advice given

Students are also expected to follow the School's Code of Conduct and other rules of conduct established and communicated to students and parents (refer to the Behaviour Policy).

LESSON PLANNING

To ensure students get the best learning experience, teachers have to plan lessons in agreement with the established curriculum requirements and the departmental schemes of work. Heads of Department have responsibility in creating departmental schemes of work (learning), whilst classroom teachers are responsible for the personal planning and delivery of each lesson.

For formal observations, staff are required to provide a written evidence of planning (see Appendix A and B). More information on lesson observation is found under the **Monitoring and Evaluation** part of this policy and in Appendix C.

Planning of lessons is facilitated by following the agreed format and components detailed below:

General information – this includes information regarding the year group, title of the lesson, number of females and males in the classroom, purpose of observation.

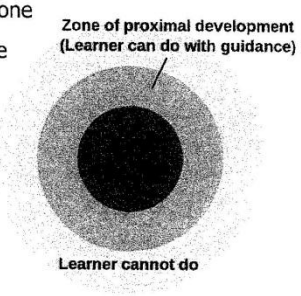
Lesson context – this offers information on the sequence of lessons, general ability of students, how the lesson links with prior lessons, the relevance of the lesson to students' learning, etc

Learning questions/objectives – these should refer to knowledge, skills and understanding that the student is expected to acquire during the lesson. Whenever possible, they should be addressed in form of questions, for ease of evaluation of learning at the end.

Key words – a list of the main important specific terminology used/learned during the lesson is important in raising literacy levels and consolidating specific vocabulary.

Activities to achieve the learning questions/objectives

It is considered good practice to apply **starter** activities to engage students in learning and bridge the learning done in previous lessons/home with the learning intended during the lesson. Starter activities are successful when they are short, relevant and captivate students' interest and curiosity on the subject studied. The **learning tasks** should be differentiated according to students' ability, whilst at the same time, reflect high expectations of achievement. Therefore, differentiation allows tasks to be within the ZPD (Zone of Proximal Development), defined as the difference between what students can achieve on themselves, without help and what they can achieve with teachers' guidance and support. These carefully planned tasks are encouraging and advancing students' learning.



Effective **differentiation** is essential in ensuring that the work set is matching the different capabilities of individuals or groups of students in order to ***extend their learning***, so they make the best possible progress. Each teacher will apply different differentiation strategies. Below are a few guidelines.

Best practice uses a variety of differentiation techniques as dictated by the learning experience:

- Differentiation by questioning – targeting questioning at particular students/group of students to extend their own learning
- Differentiation by content – students study different material within the same topic, but do the same activities
- Differentiation by task – students of different abilities are set different tasks which provide each student with a level of stress and challenge which is appropriate to their ability
- Differentiation by outcome – students of different ability are set the same task which they complete in different ways according to their ability
- Differentiation by support – students study the same materials, do the same activities, but receive different amounts of support from teacher
- Differentiation by gradation – students are given the same information and the same activities, but the activities become progressively more difficult. The students work through the activities at different rates and therefore only the more able do the most difficult tasks
- Differentiation by extension - students are given the same information and the same activities. Extension work is given to the most able after they have finished the minimum expected
- Differentiation by group work – students work in mixed ability groups. They carry out different activities depending on the role they are playing in a simulation. Roles are matched to the abilities, aptitudes and needs of the pupils.

Assessment for Learning - The process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there. Below are the key characteristics of AfL which, to ensure best practice, should be taken into consideration when planning lessons:

- Sharing learning questions/objectives with students

✓ This should be done at the beginning of the lessons and, where appropriate, during the lesson, using language that students can understand

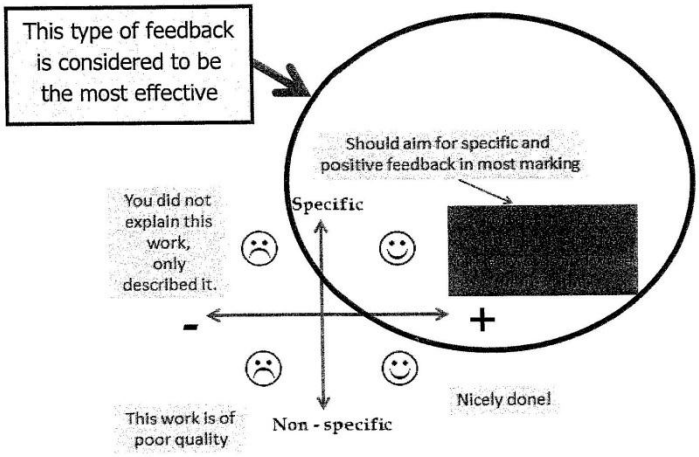
- ✓ The learning questions/objectives should be used as basis for questioning and feedback in plenaries
- ✓ Evaluate the achievement of the learning objectives to inform the next stages of planning

- Helping students to know and recognize the standards they are aiming for
  - ✓ Show students work that has met to success criteria and discuss why
  - ✓ Give students clear success criteria
  - ✓ Model what work should look like
  - ✓ Ensure there are clear, shared expectations of standard of work
  - ✓ Create displays that show work in progress and the final piece of work
- Involve students in peer and self-assessment
  - ✓ Ask pupils to explain their thinking: *'How did you get that answer?'*
  - ✓ Give time for students to reflect upon their learning and make improvements based on your feedback
  - ✓ Give students opportunities to talk/discuss and get ideas from each other on how to improve
  - ✓ Identify with students the next steps in learning

Assessment of Learning/Plenaries – this involves making a judgement about the overall learning that has taken place and it has the most impact when it is an integral part of each lesson, not just in in formal evaluations. To achieve this, best pratice links the careful planned plenary activity with the learning questions/objectives.

THE MARKING SYSTEM

At we are marking against a commonly agreed framework, which is guided by the diagram below:



We believe that:

- Students must take responsibility for improving the work in their exercise books based on teachers' marking/feedback
- Marking should open an opportunity for dialogue between students and teachers to extend learning
- Progress in the quality of work produced in books should be visible even to non-specialists (e.g.: parents, internal-external observers)
- Parents have a crucial role in helping students extend the learning at home and feedback in books should help parents achieve this role
- Literacy and numeracy levels should be raised throughout the curriculum, therefore marking will signal areas for improvement in these aspects.
- Literacy is promoted in all subjects – see Literacy Policy

NOTES:

- Practical work will not adhere to this system
- KS4 and KS5 marking will be in line with the subject specific exam board requirements
- At the moment of writing this policy, the system is in a trial period

Explaining the ___ Marking System

- The marking system will be a combination of letter codes and target codes (whole school or subject specific targets)
- When marking the teacher uses the following codes for the work that needs marking. The codes must apply to **students' personal ability**

CODE	Descriptor	Teacher action	Student action
VG *(Very Good)*	Work that fully meets the success criteria, it is neat and shows the student has a very good understanding of the concepts taught.	Gives positive and specific praise.	*Ideally*– students identify how the work has met the success criteria
G *(Good)*	Work that generally meets the success criteria and falls short on SPaG or other minor issues.	Uses SPaG symbols to give feedback and offers praise. Uses questions to make student reflect on what else can be done to improve and leaves space for answer.	Student corrects the SPaG mistakes and *ideally* identifies how the work has met the success criteria Student answers teacher's questions.
I *(Incomplete)*	Work that is incomplete.	Notes what needs to be done to complete the work and leaves visible space for the work to be completed.	Student finishes the work in the space provided.
NI *(Needs Improvement)*	Work that does not fully meet the success criteria, has SPaG concerns and where the student needs guidance on how to improve.	Uses questions to guide and extend the learning and leaves space for improvements. Uses SPaG symbols.	Students make the improvements in the space provided.
M *(Missing)*	Pieces of work that are missing (student absence)	Makes notes on what the student needs to do to catch up.	Student acts on feedback.
C *(Copied)*	Work that has been copied from the textbook or internet against teachers' instructions, or has been done by others.	Notes why there are suspicions that the work is copied.	Student does the work again.

To show progress: When remarking, the teacher checks the lessons marked as I, NI, M and C, for the improvements suggested and changes the codes: e.g.: NI/G or I/VG if applicable. If feedback has been ignored – teacher leaves the same code.
SPaG = Spelling, Grammar and Punctuation.
We will use the following SPaG symbols in our marking:

P – Punctuation
Sp – Spelling
ll – Paragraph
Λ – Omission
? – Your writing is not clear or it does not make sense

REPORTS

School reports are legal documents. Students are issued with their reports on the date indicated on the school calendar and letters will be sent home to remind parents.

For the moment, we will be using the current system of reporting to parents, however, we are in the process of changing to a system called **WCBS** which, amongst other things will allow us to:

- Access, organise, manage and share information more effectively
- Deliver reports to parents
- Deliver useful documents which will help with tracking students' progress and attainment and setting classroom and department intervention strategies to tackle underachievement

As a school, we distinguish between two sets of data that we need:

- Data collected to inform parents/careers of the performance of our students
- Data collected to inform our practice, performance and interventions at the level of classroom teacher, department and whole school

At the beginning of Year 7 students will be assessed using **MidYIS** (Middle Year Information System) which measures students', their underlying potential and their strengths and weaknesses across four sub-scales: Vocabulary, Maths, Non-Verbal and Skills and a subject specific Baseline Assessment. This is a system from which we can make accurate predictions for later academic achievement at

IGCSE. Sciences and Mathematics will be using the Cambridge Checkpoints assessments.

MONITORING AND EVALUATION

In order to ensure that the highest standards of teaching and learning are met, the system of monitoring and evaluation is designed to be rigorous, transparent and supportive of colleagues. The following strategies aim at achieving this:

A. Analysis of attainment and progress data

According to Teaching Standards to which adheres, all teachers are responsible for data analysis of their own classes and to use data to inform teaching and planning of lessons. This will be monitored by HOD and SLT.

B. Lesson Observations

At we will use formal and informal lesson observations to monitor the teaching and learning process. These are detailed below:

a) Formal Lesson Observations

i) School Evaluation lesson observations
ii) Performance Management observations
iii) Learning Walks

b) Informal Lesson Observations

i) Powerwalks
ii) Peer observations
iii) Transition observations

Appendix C details on the protocol of these observations and brings more clarification on the lesson observation process.

Appendix D shows the criteria against which the formal lesson observation judgements will be made.

Performance Management of Staff

This is a rigorous process used to celebrate and formally recognise teachers' achievements as well as to put in place mechanisms of support to improve performance where needed.

The Performance Management of staff is a process based on up to 2-3 targets:

- School Target : linked with raising achievement
- Departmental targets
- Personal targets

SLT and Line Managers will use the Teachers' Professional Standards as basis of Performance Management.

Staff are encouraged to keep a Professional Portfolio with evidence of training and professional development endeavours to serve in the Performance Management process as well as in other professional applications.

Appendix 3

Monitoring and evaluation of staff

Appendix A

LESSON PLAN

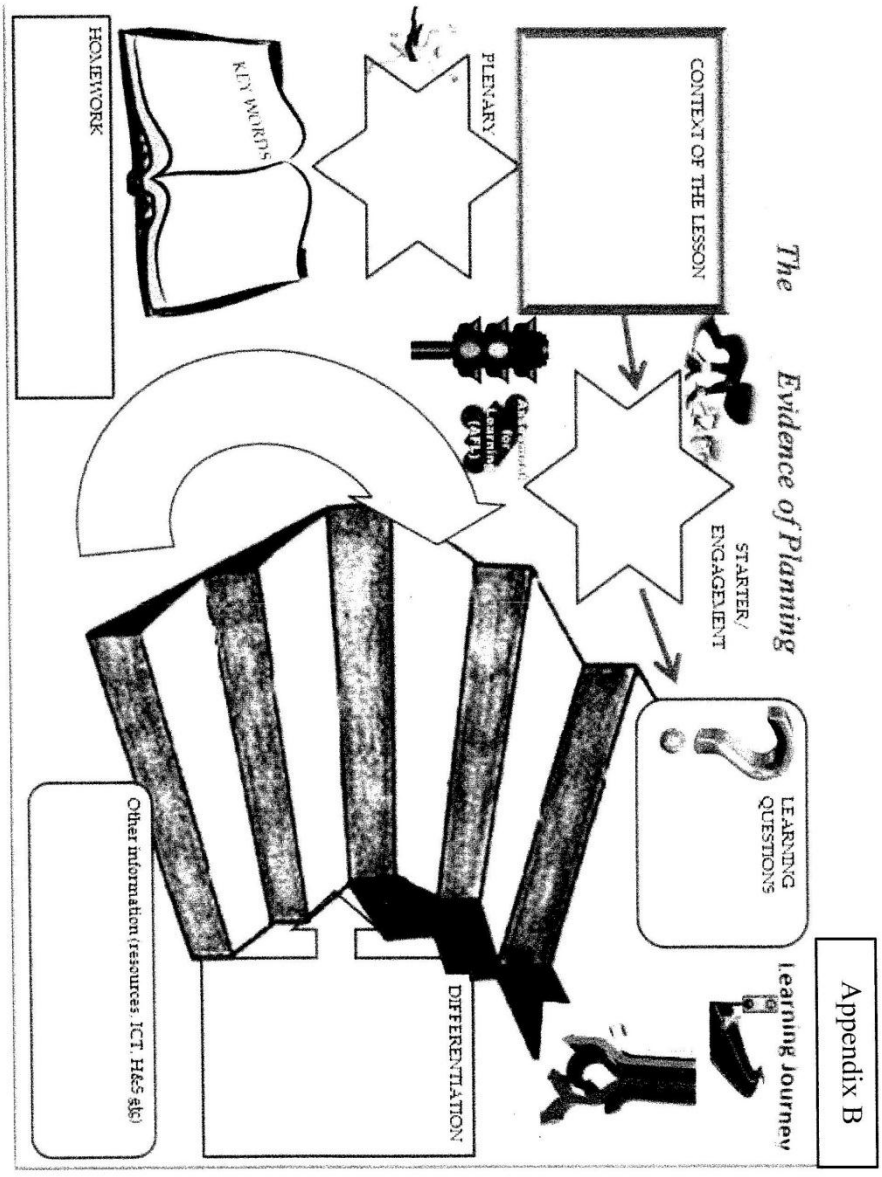
Subject/ Lesson/Teacher:	**Year/Group:** **Boys/Girls:**	**Date/Period:** **Purpose of observation:**
Lesson context:	**Other relevant information:** *(H&S, resources, ICT links, cross-curricular links, etc)*	
Learning questions/objectives: *(identify knowledge, understanding, skills)*		**Key words:**
Activities to achieve the LQ/LO: **Starter:** **Learning tasks** *(identify how tasks are differentiated, the extension offered and the tasks which are student led and promote independent learning)* **Assessment <u>of</u> learning/Plenary:**		**Assessment <u>for</u> Learning:** *(This is how I check learning throughout the lesson :…)*
Homework:		
Self-evaluation/review of lesson:		

PROTOCOL FOR LESSSON OBSERVATIONS AT

Appendix C

	FORMAL LESSON OBSERVATIONS
School Evaluation Observations	**General details:** The School Evaluation observations will be carried out in Term 1 and Term 2 Term 1 – priority for these observations will be taken by the newly employed staff for whom the observations will take place within the first 60 days and will be done initially by HOD. A follow up observation may be carried out by SLT in the following 40 days. This timeline is subject to change. All other staff will have a first observation done by HOD and a second one by SLT by the end of Term 1. Term 2 – all lesson observations will be carried out by SLT by the end of Term 2. **Protocol:** The reviewer will inform the teachers of the week in which the observations will take place. However, if the teacher wishes to be informed in more specific terms, the reviewer will decide on the date/time/class and will communicate it to the teacher before the observation takes place. In at least 1 of the School Evaluation observations, the teacher will only be announced of the week in which the observation takes place, not the exact date/time/class. In this case, only evidence of planning is required. Each School Evaluation Lesson observation will last 1 lesson. **Documents needed from teachers:** - Evidence of planning (includes formal lesson plan – Appendix A, informal lesson plan – Appendix B, planning in teacher's diary, etc). A full lesson plan (Appendix A is required in the announced observation). - At least one of the two School Evaluation lesson plans will require a full, formal lesson plan (Appendix A). - Students' exercise books will always be checked in these observations - Any material/documents the teacher wants to provide to show the progress of students. **Feedback:** Formal feedback (observation sheet) must be shared with the teacher within a week of the lesson observation. It is seen as good practice for a discussion to take place between the observer and the teacher. If the teacher asks for this discussion, the observer must offer this opportunity. The feedback sheet will be signed by both the observer and the member of staff being observed and they will keep copies.

Appendix B


The Evidence of Planning
Learning Journey
CONTEXT OF THE LESSON
STARTER/ ENGAGEMENT
LEARNING QUESTIONS
PLENARY
KEY WORDS
DIFFERENTIATION
HOMEWORK
Other information (resources: ICT, H&S etc)

Appendix C

PROTOCOL FOR LESSSON OBSERVATIONS AT

FORMAL LESSON OBSERVATIONS	
School Evaluation Observations	**General details**: The School Evaluation observations will be carried out in Term 1 and Term 2 Term 1 – priority for these observations will be taken by the newly employed staff for whom the observations will take place within the first 60 days and will be done initially by HOD. A follow up observation may be carried out by SLT in the following 40 days. This timeline is subject to change. All other staff will have a first observation done by HOD and a second one by SLT by the end of Term 1. Term 2 – all lesson observations will be carried out by SLT by the end of Term 2. **Protocol:** The reviewer will inform the teachers of the week in which the observations will take place. However, if the teacher wishes to be informed in more specific terms, the reviewer will decide on the date/time/class and will communicate it to the teacher before the observation takes place. In at least 1 of the School Evaluation observations, the teacher will only be announced of the week in which the observation takes place, not the exact date/time/class. In this case, only evidence of planning is required. Each School Evaluation Lesson observation will last 1 lesson. **Documents needed from teachers:** - Evidence of planning (includes formal lesson plan – Appendix A, informal lesson plan – Appendix B, planning in teacher's diary, etc). A full lesson plan (Appendix A is required in the announced observation). - At least one of the two School Evaluation lesson plans will require a full, formal lesson plan (Appendix A). - Students' exercise books will always be checked in these observations - Any material/documents the teacher wants to provide to show the progress of students. **Feedback:** Formal feedback (observation sheet) must be shared with the teacher within a week of the lesson observation. It is seen as good practice for a discussion to take place between the observer and the teacher. If the teacher asks for this discussion, the observer must offer this opportunity. The feedback sheet will be signed by both the observer and the member of staff being observed and they will keep copies.

Performance Management Observations	**General details:** Ideally, these start in Oct. and the Performance Management cycle finishes at the end of the academic year. They are carried out by SLT, HOD and HOY as specified by the Headteacher at the beginning of the cycle. **Protocol:** There will be a maximum of 2 lesson observations per cycle and the foci of the observation will be against the targets set in the initial planning meeting, mutually agreed between reviewer and teacher. The time/date/class to be observed will be mutually agreed and communicated in advance to the teacher. They will also figure in the action plan following the initial Performance Management planning meeting. The Performance Management lesson observation will last 1 lesson. **Documents needed from teachers:** - Documents depend on the targets set and on the mutually agreed collection of evidence which must be specified in the Performance Management documents. **Feedback:** - Feedback of lesson observation must be given to the teacher within a week of the lesson observation and mutually agreed. - The feedback sheet will be signed by both the observer and the member of staff being observed and they will both keep a copy
Learning Walks	**General details:** These lesson observations can be carried out several times throughout the year. The focus will be on a specific pastoral or teaching and learning area (eg: Behaviour of Year 8 students, Differentiation strategies used in lessons, Assessment for Learning, Collaborative learning, etc). **Protocol:** The observations will last for 15-20 min. The teacher will be informed of the week(s) in which the observations will take place, but no specific date/times will be given. SLT and HOY will do the observations if the focus is a pastoral one. SLT and HOD will do the observations if the focus is a curricular one.

	Documents needed from teachers: - No formal lesson plans are required, but teachers should have prepared documents that best highlight the use of the strategy which constitutes the focus of the Learning Walk. **Feedback** - Feedback will normally be given to HOY (if the focus is pastoral) or to HOD (if the focus is curricular). This will be general feedback in the form of Successful strategies observed and Suggestions for improvement. Only exceptionally, feedback will be given to the teacher.
	INFORMAL LESSON OBSERVATIONS
Powerwalks/ Walkabouts	**General details:** These will be carried out at any time throughout the school year and the focus will be to get a general feel of the general pattern of classroom practice. A central record will be kept of these observations. **Protocol** There will be no notice of when these observations will take place. They can be carried out by SLT, HOD or HOY (only to look at pastoral aspects). These observations will only last 5-7 min. **Documents needed from teachers:** - No documents are required **Feedback** - Feedback will only be given where/if appropriate and/or if the teacher requests it.
Peer observations	**General details:** These observations are carried out throughout the school year, between members of staff with(out) having to inform the HOD or SLT, **but** they must be mutually agreed in all aspects (protocol, focus, documents needed, feedback, etc). It is considered good practice if teachers engage in this type of practice and keep a record (with mutually agreed content) to show their active engagement in improving their teaching practice. This record will be used by the teacher in whichever way he/she thinks appropriate.

Transition Observations	**General details:** These observations will be organised by Deputies for KS2, KS3 and KS4 with HOY and Year Coordinator (primary). The focus will be on curricular or pastoral aspects to ensure a smooth transition between KS2 – KS3, KS3-KS4 or KS4-KS5. They can be carried out before Oct half-term – if the focus is on settling in the new Key Stage, or throughout the year, as required. **Protocol** These observations are a subtype of Peer observations, so they must follow the guidelines given for protocol, documents required and feedback mentioned above. It is an expectation, however that staff engage with these observations.

Appendix D

Lesson Observation - *Quality of teaching using the Ofsted 2012 grade descriptors, adapted for this individual lesson observation proforma.*

Teacher:		**Observer's role:**	**Date:**	**Year & Class:**	**Subject:**	
Observer:		**CL/SL SLT AST Other**	**Period:**	**Set/Group:**	**Length of Observation:**	
Purpose of observation:	*Please circle:* **Performance Management / CPD / Interview / NQT training / Other:**				**Time period:**	
Seating Plan provided?	Please circle: Yes / No / n.a.	**Class data provided?**	Please circle: **Yes** / No / n.a..	**Target from last observation?**		

Focus Areas	**REQUIRES IMPROVEMENT (3)**	**GOOD (2)**	**OUTSTANDING (1)**
Teacher Standard 3 **Subject Knowledge.** Teacher Standard 6 **Use of Assessment.**	• Weak knowledge of the curriculum. • Assessment of learners' work is poor and oral feedback is not effective. • Assessment is not used effectively to help pupils improve. • Assessment takes too little account of pupils learning or understanding. ☐ • Is not yet good. *This can include:* • *The teacher knows the subject and most learners understand course requirements but lacks accuracy.* • *Assessment is present, but may lack rigour and challenge.* ☐	• Teachers have well-developed subject knowledge. • Assessment of prior skills knowledge and understanding is careful and accurate. • Assessment is challenging: matches most pupils needs; enthuse & motivate: changes to tasks are timely and appropriate. • Detailed oral/written feedback is provided so learners know how well they have done and how to improve. • Learners are guided to assess their work themselves against clear criteria and to set targets to improve. This is usually timely or relevant. ☐	• Excellent subject knowledge with cross-curricular references. • Prior learning is assessed systematically & accurately • Understanding is checked systematically through effective questioning throughout the lesson, anticipating interventions. • Systems are in place to involve all students in reading/responding to feedback and acting on them. • Learners are confident and critical in assessing their own and others' work, and to set meaningful targets for improvement. ☐
What Evidence?			

Teacher Standard 4, 5 & 8 **Teaching** *(Use of support, differentiation, AfL, literacy and numeracy development)*	• Learning activities are not sufficiently well matched to the needs of pupils. • Teacher expectations are not high enough. • Pupils cannot communicate, read, write or use maths as well as they should. • TAs not involved in the lesson & given little or no direction. ☐	• Is not yet good. *This can include:* • *Teaching strategies do not usually meet individual pupil needs and do not provide challenge.* • *Teaching literacy, numeracy and other skills may be inconsistent.* • *TAs are not well deployed in all aspects of the lesson.* ☐	• Tasks are challenging: match most pupils needs: enthuse & motivate them; effective strategies used. Work is monitored during lessons, misconceptions are generally picked up. • Astute planning is effective and interventions and support are appropriate. • Expectations are high. • Literacy and numeracy skills and other skills are promoted. • Teaching consistently deepens pupils' knowledge and understanding and allows them to develop a range of skills. • Teacher listens astutely, observes carefully and questions skillfully to reshape tasks and improve learning. • TAs are well deployed to support learning. ☐	• Tasks challenging, match pupils needs accurately. • Lessons are well judged and often imaginative teaching strategies are used. • Expectations are consistently high. • Intervention and support are appropriate and have notable impact. • Expert use of questioning probes understanding and teases out misconceptions. All learners are enthusiastic and keen to move on. • Teaching of literacy, numeracy and other skills are exceptional; every opportunity is taken to develop skills in other subjects. • TAs involved in planning. Good communication between teacher and TA is evident. ☐
What Evidence?				

Teacher Standard 2 **Learning and Progress** *(Engagement, interest, motivation, resilience)*	• Students are passive. • Learners are not involved and frequently off task. • Teaching fails to excite, enthuse, engage or motivate particular groups (inc SEN/D) of pupils. • Pupils or groups of pupils are making inadequate progress. ☐	• Is not yet good. *This can include:* • *Students lack engagement and motivation to complete work well.* • *Progress is not in line with that made by similar students nationally from similar starting points.* ☐	• Most students are enthused and motivated to participate. • Pupils' are resilient, confident and independent • Pupils learn well across the curriculum. • Most pupils, including groups and pupils with SEN/D, achieve well across the curriculum. ☐	• Pupils show high levels of enthusiasm, interest, resilience, confidence and engagement • Pupils learn exceptionally well. • All pupils make rapid and sustained progress. ☐
What Evidence?				

Teacher Standard 4 **Homework**	• No homework is set to extend and challenge students. • Good pace and challenge in the lesson and students were clearly enjoying the lesson. The change of end the learners. opportunity to develop. ☐	• Is not yet good. *This can include:* • *Inappropriate homework is set. It does not contribute reasonably well to learning, including SEN/D pupils.* ☐	• Appropriate and regular homework contributes well to pupils' learning, including SEN/D pupils. ☐	• Appropriate and regular homework contributes very well to pupils' learning. ☐
What Evidence?				
Teacher Standard 1 & 7 **Attitudes to Learning.** **Behaviour** *(strategies for managing pupils behaviour)*	• Pupils' lack of engagement and persistent low-level disruption contribute more than occasionally to reduced learning and/or a disorderly classroom environment. ☐	• Is not yet good *This can include:* • *Pupils do not always respond promptly to teachers' direction.* • *Major disruption to learning is uncommon, but occasional low-level disruption may occur.* ☐	• Pupils respond very well to the teacher's behaviour systems and work cooperatively with each other. • Low level disruption is uncommon • Pupils are typically considerate, respectful and courteous; they consistently meet teacher's expectations. • Behaviour management strategies are applied consistently well. ☐	• Pupils' attitudes to learning are exemplary. • Pupils 'make every effort' to ensure that others learn and thrive in an atmosphere of respect and dignity. • Very high level of engagement, courtesy, collaboration and cooperation. • Lesson proceeds without interruption. • There is a systematic, consistently applied approach to behaviour management, which make a strong contribution to an exceptionally positive climate for learning. ☐
What Evidence?				

Teacher's Name:		Observer's name:		Date:	
Strengths:					
1					
2					
1					
2					
Suggest a Professional Development Need:					
1					
2					
1. Using the grade descriptors (pages 1-2), give a grade for the following categories and state where the evidence is located on the lesson observation form.					
Teaching grade		**Progress grade**		**Attitudes to learning / Behaviour grade**	
Teacher Standards 5 & 8		Teacher Standard 2		Teacher Standards 1 & 7	
2. Looking at the learning and progress grade descriptors, establish a grade for learning and progress (O=Outstanding, G=Good, Req= Requires Improvement, In=Inadequate)					
Quality of teaching (overall grade)					
Standards 1 & 2					

Appendix 5a

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EdD Educational Studies

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08 October 2016

Dear John

ETHICAL APPROVAL LETTER

A phenomenological exploration: the voices of Middle Eastern A-level students

Thank you for submitting your ethics application. I am writing to confirm that your application has now been approved.

We recommend you refer to the reviewers' additional comments (please see attached). You should discuss how you are going to respond to these comments with your supervisor BEFORE you proceed with your research.

This letter is evidence that your application has been approved and should be included as an Appendix in your final submission.

Good luck with your research.

Yours sincerely

Professor Dan Goodley
Chair of the School of Education Ethics Review Panel

cc Dr Simon Warren
Enc Ethical Review Feedback Sheet

Appendix 5b

(School Letter Head)

Information sheet for potentially interested participants in Mr. Shelton's Doctoral research study

The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

You are being invited to take part in a research project. Before you decide, it is important for you to understand why the research is being done, and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask if there is anything that is not clear, or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the project's purpose?

The aim of the study is to try and understand more about cultural issues in Kuwait and how contemporary British ideas about teaching and learning impact on students and teachers in the Middle East setting.

The objective is to learn something about how you as a student or teacher experience these ideas about education in your everyday school lives in terms of your feelings, thoughts and actions.

The approach that will be used in the study will make use of informal meetings / interviews, your written expressed thoughts and feelings, and / or any pictures or diagrams that might help you to relate your experiences.

Why have I been chosen?

As an 'A' level student, you will have been in the school for a significant period of time, and in our opinion will have developed a sense of maturity. You are a person from the Middle East and have been immersed in the local culture. This makes you an expert in the experience of being exposed to Western ideas about teaching and learning, within your culture. We are interested in learning about how you experience this.

If you are a teacher, you will have been in the school for a significant period of time. You are also of Western ethnicity and yet have also been immersed in the local culture. This makes you an expert in the experience of implementing Western ideology about teaching and learning within a Middle Eastern cultural context. We are interested in learning about how you experience this phenomenon.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a participant consent form. If you are a student we will also ask for the consent of your parent / guardian. You can still withdraw at any time. You do not have to give a reason for your choice. In particular we wish to offer our reassurance that whether or not you decide to take part in this study, or to withdraw at any stage, and regardless of what you may have to say during the research, this will not affect how you are treated at school in any way. The organisation of the study will give due consideration and care that Mr. Shelton's role as Head of Department and teacher are entirely separate to his role as principal researcher in this study.

What will happen to me if I take part?

You will be invited to attend an informal interview/discussion with Mr. Shelton on three separate occasions during this academic year, at school. Each interview is expected to last no more than 30-45 minutes. It depends entirely on how the discussion evolves and what you might wish to say. We are interested in your feelings, thoughts and experiences. You may wish to keep a written journal or audio recording of these things. In some cases you may wish to express your experiences in a picture or diagram. Mr. Shelton will help you to express your experiences through questions and discussion.

Will I be recorded, and how will the recorded media be used?

The session will be audio (sound) recorded so that afterwards we can make a written transcript of your experiences. These recordings and transcripts will be kept confidential during the research, and your name will not appear on the transcript. The audio recordings will be destroyed after the research study has been completed.

The audio recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

What do I have to do?

Just come to the interview/discussion sessions at pre-appointed times, in school time.

What are the possible disadvantages and risks of taking part?

None

What are the possible benefits of taking part?

Other than you have an opportunity to express your experiences confidentially, there are no immediate benefits for those people participating in the study. However, it is hoped that this work will contribute to our understanding of the dynamics of importing and implementing Western educational ideology into the Middle Eastern cultural context. This could have significant implications for Kuwait's proposed development over the next twenty years.

What happens if the research study stops earlier than expected?

This will only impact on whether or not you will need to attend the interviews/discussions.

What if something goes wrong?

Should you wish to raise a complaint, in the first instance you should inform, Mr. Shelton (Head of Science), who may be contacted personally in Laboratory 10 at the (name of school), or by telephone on 50107702. Email: jonsan_shelton@yahoo.com

However, should you feel that your complaint has not been handled to your satisfaction, you may contact the research project supervisor, Dr. Simon Warren, Lecturer in Critical Policy Studies at the University of Sheffield, School of Education, 388 Glossop Road, Sheffield, S10 2JA, UK. Tel: +44 (0)114 2228089 or Fax: +44 (0)114 2796236. Email: s.a.warren@shef.ac.uk

Should you still be dissatisfied with the outcome of your complaint, you may contact the University of Sheffield, School of Education Registrar and Secretary.

Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any reports or publications. Only you, Mr. Shelton, Mrs. Rifna Aktar (Chemistry teacher), and Dr. Simon Warren (Research project supervisor) will have access to the data. All paper data will be kept secure in a locked filing cabinet and electronic data will be kept secure on a purposely allocated laptop computer with access code activation.

What will happen to the results of the research project?

The primary purpose of the research is to educate Mr. Shelton with regard to academic research protocol, and award the research degree of Doctor of Education. The data we collect from you will be used anonymously in the final thesis publication, which is envisaged to be at the earliest in October 2015. You may obtain a copy of the thesis after this time through Mr. Shelton and his supervisor. You will not be identified in any report or publication.

Since this study is essentially small scale in nature, the data collected during the course of the project might be used for additional or subsequent research.

Who is organising and funding the research?

There is no funding or sponsorship of this study.

Who has ethically reviewed the project?

This project has been ethically approved via The School of Education department's ethics review procedure (every academic department either administers the University's Ethics Review Procedure itself, internally within the department, or accesses the University's Ethics Review Procedure via a cognate, partner department). The University's Research Ethics Committee monitors the application and delivery of the University's Ethics Review Procedure across the University.

Contact for further information

Mr. Shelton (Head of Science), who may be contacted personally in Laboratory 10 at the (name of school), or by telephone on 50107702. Email: jonsan_shelton@yahoo.com

Dr. Simon Warren, Lecturer in Critical Policy Studies at the University of Sheffield, School of Education, 388 Glossop Road, Sheffield, S10 2JA, UK. Tel: +44 (0)114 2228089 or Fax: +44 (0)114 2796236. Email: s.a.warren@shef.ac.uk

Finally may we take this opportunity to thank you for your interest in the study and taking the time to read and consider this information sheet.

Yours faithfully,

John Shelton (Principal Researcher)

Head of Science.

Appendix 5c

(School Letter Head)

Invitation to take part in a doctoral research study

Thank you once again for taking the time to read and consider the information letter regarding Mr. Shelton's doctoral research study.

You are invited to become a participant in this study, should you so wish.

This first meeting with participants will serve to:

- clarify the purpose, nature, and processes of the research
- obtain participant and parental consent;
- explain confidentiality and methods of data storage and access
- assign pseudonyms in place of real names
- answer queries from participants
- establish a sense of rapport, trust, and understanding of participant life context.

If you are interested in taking part in this study, please fill in and return the slip below to Mr. Shelton at the (name of school). We will then contact you again to agree a suitable time for our first meeting.

Yours faithfully,

John Shelton (Principal Researcher)
Head of Science.

……

I have read the information sheet regarding Mr. Shelton's doctoral research study.
I am interested in taking part in this study and would like to attend the first meeting as outlined in this letter.

STUDENT NAME: …… FORM GROUP: …….

SIGNED: ……

PARENT/GUARDIAN NAME: …….. SIGNED: ……

TELEPHONE NUMBER: …….. EMAIL: ……..

Appendix 5d

Parental Consent Form

Title of Project: A phenomenological exploration: The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

Name of Researcher: Mr John Shelton

Participant Identification Number for this project:

Please initial box

1. I confirm that I have read and understand the information letter dated 14th January 2014 for the above project and have had the opportunity to ask questions. ☐
2. I understand that my son/daughter participation is voluntary and that he/she is free to withdraw at any time without giving any reason. Tel: 50107702. Email: jonsan_shelton@yahoo.com ☐
3. I understand that my son/daughter responses will be anonymised before analysis. I give permission for members of the research team to have access to my son/daughter anonymised responses. ☐
4. I agree to my son/daughter taking part in the above research project. ☐

Name of Participant (*or legal representative*)	Date	Signature
Name of person taking consent (*if different from lead researcher*)	Date	Signature
Lead Researcher	Date	Signature

To be signed and dated in presence of the participant

To be signed and dated in presence of the participant

Copies:

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy for the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.

Consent Form

Title of Project: A phenomenological exploration: The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

Name of Researcher: Mr John Shelton

Participant Identification Number for this project:

Please initial box

1. I confirm that I have read and understand the information letter dated 14th January 2014 for the above project and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Tel: 50107702. Email: jonsan_shelton@yahoo.com ☐
3. I understand that my responses will be anonymised before analysis. I give permission for members of the research team to have access to my anonymised responses. ☐
4. I agree to take part in the above research project. ☐

Name of Participant *(or legal representative)*	Date	Signature
Name of person taking consent *(if different from lead researcher)*	Date	Signature
Lead Researcher	Date	Signature

To be signed and dated in presence of the participant

To be signed and dated in presence of the participant

Copies:

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy for the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.

Appendix 5e

Oath of Confidentiality

Study Title:

A phenomenological exploration: The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

This study requires that participants must be afforded a high degree of confidentiality and anonymity.

I accept and adhere to all legal and ethical requirements by keeping all information with respect to the participant's identity in this research confidential.

The identity of the participants will not be revealed. Any references to data that might lead to the identification of participants will be changed or omitted to ensure protection of the identity of participants.

NAME: MR. TOM SHELTON POSITION: HEAD OF SCIENCE

DATE: 2/02/14

(LEAD RESEARCHER) T. Shelton

Oath of Confidentiality

Study Title:

A phenomenological exploration: The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

This study requires that participants must be afforded a high degree of confidentiality and anonymity.

I accept and adhere to all legal and ethical requirements by keeping all information with respect to the participant's identity in this research confidential.

The identity of the participants will not be revealed. Any references to data that might lead to the identification of participants will be changed or omitted to ensure protection of the identity of participants.

NAME: Rida Aktar POSITION: Chemistry Teacher (Peer Reviewer)

DATE: 2/2/19

R Aktar

Oath of Confidentiality

Study Title:

A phenomenological exploration: The voices of Middle Eastern 'A' level students and their teachers in a British curriculum International School in the Middle East.

This study requires that participants must be afforded a high degree of confidentiality and anonymity.

I accept and adhere to all legal and ethical requirements by keeping all information with respect to the participant's identity in this research confidential.

The identity of the participants will not be revealed. Any references to data that might lead to the identification of participants will be changed or omitted to ensure protection of the identity of participants.

NAME: PARVAZ SHARIF POSITION: DEPUTY HEAD KS4&5

DATE: Feb 2014

Appendix 5f

HSW MAPPED TO LEARNING OUTCOMES INVESTIGATIVE SKILLS.
KEY SKILLS MAPPED TO UNIT AREAS.
WIDER ISSUES.

STATEMENT NUMBER	HSW STATEMENT	UNIT	TOPIC	OUTCOME NUMBER	LEARNING OUTCOME (Syllabus Reference)	PRACTICAL & INVESTIGATIVE SKILLS OF HSW (p12-13) (Apply to outcome 1 of all Topics)	POWERPOINT REFERENCE
1	Use theories to develop & modify explanations	AS 1	T2	2	Fluid mosaic model - Interpretation of data to create the model	Hypothesising, Creative thinking, Modelling	54
2	Pose Qs. Define problems. Present arguments & ideas.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Identify scientific Qs. Apply theories to answer	P1 U1
		AS 1	T1	16	Vitamin C content fruit juice practical		P2 U1
		AS 1	T2	5	Membrane permeability practical. Relate to membrane structure.		P4: 50-54
		AS 1	T2	9	Enzyme conc. Practical.		P5 U1
		AS2	T3	7	Root tip squash practical.		P1 U2
		AS2	T3	12	Totipotency in plant tissue cultures practical.		P2 U2
		AS2	T4	8	**Tensile strength practical.**		P3 U2
3	Appropriate methodology to answer Qs & solve problems.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Justify methods, techniques.	P1 U1
		AS 1	T1	16	Vitamin C content fruit juice practical		P2 U1
		AS 1	T2	5	Membrane permeability practical. Relate to membrane structure.		P4 U1; 50-54
		AS 1	T2	9	Enzyme conc. Practical.		P5 U1
		AS2	T3	7	Root tip squash practical.		P1 U2
		AS2	T3	12	Totipotency in plant tissue cultures practical.		P2 U2
		AS2	T4	8	**Tensile strength practical.**		P3 U2
4	Investigative activities range of contexts with risk management.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Risk assessment	P1 U1
		AS 1	T1	16	Vitamin C content fruit juice practical		P2 U1
		AS 1	T2	5	Membrane permeability practical. Relate to membrane structure.		P4 U1; 50-54
		AS 1	T2	9	Enzyme conc. Practical.		P5 U1
		AS2	T3	7	Root tip squash practical.		P1 U2
		AS2	T3	12	Totipotency in plant tissue cultures practical.		P2 U2
		AS2	T4	8	**Tensile strength practical.**		P3 U2
5	Analysis & Interpretation data. Correlation & causal relationship.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Identify patterns & relationships	P1 U1
		AS 1	T1	14	HDL & LDL. Evidence for causal link to cholesterol (LDL) & CVD.		98-104; 111-113
		AS 1	T1	16	Vitamin C content fruit juice practical		P2 U1
		AS 1	T1	17	Analysis of data on energy & diet. Discuss consequences E imbalance.		95-96
		AS 1	T1	18	Illness & mortality data analysis. Health risk. Correlation or cause.		96-104
		A 2	T1	18	Cultures for cancer research		13-17 (23)
6	Evaluate methodology. Resolve conflicting evidence.	AS 1	T1	19	Evaluate study design for determination of health risk.	Evaluate validity of inferences	104
		AS2	T3	12	Totipotency in plant tissue cultures practical.	Recognise errors & conflicting evidence	P2 U2
7	Appreciation of tentative nature of scientific knowledge.	AS 1	T2	11	Meselson & Stahl investigation DNA rep. Refuted competing theories	Explain how scientific theories are developed, refined, supported & refuted	11--13
		AS2	T3	14	Interpretation data on genes & environment interaction - difficulty.		75
		A 2	T3	15	Examination of data in models of gene control e.g. lactose		13-17
8	Communicate information & ideas.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Present scientific information using scientific terminology	P1 U1
		AS 1	T1	16	Vitamin C content fruit juice practical		P2 U1
		AS 1	T2	5	Membrane permeability practical. Relate to membrane structure.		P4 U1; 50-54
		AS 1	T2	9	Enzyme conc. Practical.		P5 U1
		AS2	T3	7	Root tip squash practical.		P1 U2
		AS2	T3	12	Totipotency in plant tissue cultures practical.		P2 U2
		AS2	T4	8	**Tensile strength practical.**		P3 U2
9	Applications, implications of science. Risk perception.	AS 1	T1	13	Treatment of CVD.	Evaluate activities in terms of benefits & risks.	118-125
		AS 1	T1	20	Explain differences in risk perception related to life style & CVD.	Discuss risk as actual & perceived with associated consequences.	97-99
10	Ethical issues.	AS 1	T1	9	Daphnia practical caffein on heart rate practical.	Identify ethical issues.	P1 U1
		AS 1	T2	20	Social & ethical issues of genetic screening.	Discuss solutions from ethical perspectives	95-97
		AS2	T3	11	Use of stem cells for research		68

HSW MAPPED TO LEARNING OUTCOMES INVESTIGATIVE SKILLS.
KEY SKILLS MAPPED TO UNIT AREAS.
WIDER ISSUES.

11	Peer review process. Critical evaluation.	AS 1	T2	11	Meselson & Stahl Investigation DNA rep. Refuted competing theories	Discuss importance of critical evaluation that challenges established theories.	11–13
		AS2	T4	**14**	**Adaptation of organisms to environment.**		52-70; (70); also 48 T2
		A 2	T5	23	Criticism of peer review process. Theories of evolution	Describe how peer review process in journals & conferences contributes to validation.	
			T6	25	Criticism of peer review process. Theories of evolution		
12	Society & Science.	AS 1	T1	15	Discuss use of data on effects smoking, diet, exercise on risk CVD.		97-104
		AS2	T3	11	Stem cell use. Decisions on therapies - regulation. Research.		68
		A 2	T6	25	Ethics in research. Influences on research.	Discuss how science influences decisions.	23

Appendix 5g

INTERVIEW PROTOCOL

Phase I – contextualization and apprehending the phenomenon

Main Questions:

I am curious about your personal experiences with the A level biology course …. your thoughts about it, and the variety of feelings and ideas it may have invoked as you have progressed through it.

To begin with it would be interesting to learn a little more about you and how you see yourself in the context of our situation here in Kuwait.

Contextualisation Main Qs:

Q. Could you tell me something about your background … your nationality; how long you have lived in Kuwait; where you lived before; how you came to be here?

Q. What do you like most and least about being in Kuwait?

Q. What do you like most and least about being in (name of school)?

Q. Tell me about how you came to be on the A level biology course?

Q. Could you describe what you like most and least about the course?

Q. Overall what has been your experience with this course so far?

Apprehending the phenomenon – Mini-tour targeted questions:

Q. Could you tell me something of what happens in a typical lesson that you like?

Q. Could you tell me something of what happens in a typical lesson that you don't like so much?

Q. What is important for you about a particular set of events that you consider make a lesson "good", "enjoyable", "useful"?

Q. What is important for you about a particular set of events that you consider make a lesson not so good, less enjoyable, and not so useful?

Q. If you consider a lesson "good", "enjoyable", "useful", what kinds of things characterize it, or what specifically would you like to see as part of its structure?

Q. Can you tell me about a "not so good" lesson for you? How is it the same or different from a "good" lesson?

More targeted questions

Let's focus now on some of the specific components of the course, and their intended learning outcomes.

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***interpret data*** that requires you to ***identify patterns and relationships***?

E.g. Correlation or causal
- Smoking & link to lung cancer & CVD
- Cholesterol levels & link to CVD
- Diet & link to health
- Global Warming & suggested link to CO2 levels

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***evaluate a method for reliability*** in a practical investigation?

E.g.
- Daphnia & heart rate in relation to caffeine concentration.
- Measuring content of Vitamin C in fruit juice.
- Effect of temperature on membrane permeability (beetroot).

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***evaluate the validity of the results*** from a study, and the ***conclusions (inferences)*** that might be drawn from those results?

E.g. - Study on determination of health risk such as diet and health.

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to appreciate the ***tentative (provisional) nature of scientific knowledge*** and how ***theories are developed and refined or even refuted*** (challenged or dismissed)?

E.g. - The work of Meselson & Stahl on DNA replication models (Conservative, Semi-conservative).
- Gene interaction with the environment in terms of criminal or violent behaviour.
- Extrapolation of Global Warming data.

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***evaluate risk perception*** as actual or perceived?

E.g.
- Life style and development of CVD.
- Treatment of CVD in terms of perceived benefits or risks.

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***identify and discuss ethical, moral & social issues***?

E.g.
- Human Genome Project.
- Genetic screening for inherited genetic conditions.
- Use of stem cells for research.
- The regulation of research into gene therapies.
- The use of animals in scientific research.
- The Global Warming debate, and who influences it.

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***discuss and appreciate the peer review process*** (process of ***critical evaluation***) in the scientific community?

E.g. - Evidence to show adaptations of organisms to their environment.
- New evidence for the theory of evolution (DNA & Human Genome project findings).

Q. Could you tell me something of your experience, thoughts, and feelings when you are asked to ***communicate information and ideas to others in the group***?

E.g. - Ethical issues surrounding stem cell research & cloning.
- The Global Warming debate.

Q. Could you tell me something of your experience, thoughts, and feelings when you are required to ***work with others collaboratively*** during practical investigations or group presentations or debates?

E.g. - Planning
- how to identify & agree on objectives & how you are going to meet them.
- Co-operation
- dividing up the task
- working as a team
- Improving collaboration
- review against the plan
- identifying factors that influence the outcome
- agree on ways to improve effectiveness

Q. Can you tell me something about how your experience of the specific components of the course we have discussed, is different to ***your experience of the factual biological knowledge*** components that you have undertaken?

E.g. - Plant structure and function
- Biological molecules
- Structure of DNA
- DNA and protein synthesis
- Heart structure and function

INTERJECT ALL QUESTIONS WITH PROBES & WHERE APPROPRIATE IMMEDIATE FOLLOW UP QUESTIONS.

Follow up questions during an interview:

<u>Oversimplifications</u>

Q. Can you give me an example of when…?
Q. When might it be …?

<u>New ideas</u>

Q. If you know of some cases where this occurred, what can you tell me about them?
Q. Are there possible conflicts with …?
Q. Have you actually …?

Missing information
Q. I noticed you didn't mention …?

PROBES

Continuation:
Q. Could you tell me a little more about that?
Q. Go on – this is interesting.
Q. Mm mm – So?
Q. You think so?
Q. Then what …?
Q. And …?

Completion:
Q. You were saying …?
Q. What do you mean?
Q. How about the …?
Q. We skipped … Can we talk about that now?

Elaboration:
Q. Such as?
Q. Could you give me an example?
Q. Can you tell me more about that?
Q. That sounds interesting, what can you tell me about …?
Q. Sounds like there is a story there?
Q. Maybe something else was going on?

Attention:
Q. OK I understand.
Q. That is interesting!
Q. Can I quote you on that?

Clarification:
Q. You said … Was that … or …?
Q. Can you run that by me again, I didn't quite follow.

Steering:
Q. Sorry, I distracted you with that … You were talking about …?
Q. Sorry, I distracted you by asking … Circle back a bit and let's explore …

Sequence:
Q. Could you tell me what happened step by step?
Q. When did that happen?
Evidence:
Q. Did you personally …?
Q. Were you there when …?
Q. You said … Could you give me an example?
Q. How did you arrive at that …?
Q. What occurred that made you think that?
Q. Do you have some specific instances in mind or are you speaking in general?
Q. You must be joking; that is too wild to be true?

Slant:
Q. How did you feel about …?
Q. Did the … make you feel …?
Q. Really?
Q. Is that so?
Q. Are you saying that …?

Appendix 5h

Phase II Interview protocol

Participant number:

The purpose of this interview is to follow up on what has come out of the first set of interviews, across the board, sort of general themes that seem to be emerging. So what I'm going to do is throw a statement at you, which is based on information that seems to be emerging from the previous set of interviews and I'd like you to give me your reaction to that statement.

So the first statement is:

Exam performance driven theme descriptor:

My main goal from this course is to pass the exam and get the grade that I need.

Some of the things we have to consider in the syllabus are unnecessary or make it more difficult for me to get the grade that I need.

Preference for information based learning descriptor

I am more used to learning factual information to pass exams. I find this new (different) way of teaching difficult.

People in Kuwait think teaching and learning should be along more traditional lines.

Reaction to / perception of HSW descriptor

The HSW aspects of the examination questions make it more difficult for me to understand what the question is getting at.

I find the HSW aspects of the course difficult to engage with.

Impact of religion descriptor

Discussions involving ethical, moral, and social issues inevitably draws upon my religious thinking.

Appendix 5j

Theme	Participant & (Transcript Page)	Comment
Cultural Link & Work attitude	1(2), 1(3),	Everything provided affecting ability to be independent.
	1(2), 1(3), 1(4),	Lazy, lack of work ethic, poor attitude to work & responsibility.
	1(17),1(18),8(21),	Others sit back while you do all the work in group activities.
	2(1),2(2),	Kuwaitis consider themselves better than others.

Theme	Participant & (Page)	Comment
Cultural link & sheltered community. Corruption	1(3),10(1),10(2),	Restricted rights & freedoms affecting behaviour & independence.
	1(3), 3(3), 3(4),10(1),10(2),	Sexism & male female interaction. Segregation issues.
	3(2),3(3),	Kuwait very traditional set culture influenced by religious perspective.
	3(3),8(3),10(2),12(21),	Feelings of discomfort with the Kuwait culture.
	5(1),12(1),12(2),	Differences in makeup of population.
	5(1),5(2),6(2),8(2),	Kuwaitis think they are better. Wasta influence in society.
	6(1),6(2),6(3),	Corruption in politics & elsewhere
	6(3),6(4),	Teaching viewed as low esteem or status
	10(3),12(23),	Sheltered from realities of outside world
	10(4),	Restrictive curriculum in terms of option choices
	12(2),12(10),12(22),	Impact of expatriates changing traditional culture

Theme	Participant & (Transcript Page)	Comment
Cultural link & attitude to education	2(11),2(3),2(4),1(8),1(4),1(5),5(5),6(4),6(5),6(15),7(2),7(3),7(7),7(9),7(14),7(20),8(5),8(7),10(4),10(9),10(13),11(4),11(5),12(1),12(11),	Focus on need for subject & exam grades to go to university / profession. Parental pressure
	1(11),1(12),1(13),8(13),11(20),12(11),12(12),12(20),	Concern with unnecessary information.
	1(14),1(15),	Study as a stressful experience.
	3(4),3(13),5(12),7(4),8(23),12(6),12(9),	Not used to HSW approach.
	3(4),3(13),7(2),7(3),7(4),7(6),7(7),7(20),11(3),11(5),11(7),11(8),12(4),12(5),12(6),12(7),12(10),	Used to information based learning.
	3(4),3(13),3(7),3(8),3(9),3(12),3(16),3(17),3(22),5(15),5(18),6(13),6(14),7(20),10(5),10(6),10(11),10(12),10(13),10(14),10(15),10(19),12(6),12(11),12(12),12(13),12(18),	Perceived vagueness & ambiguity in Edexcel questions. Tension.
	2(5),5(10),7(7),11(8),	Desire to cover material quickly.
	2(8),2(6),2(7),6(21),7(4),7(6),7(12),7(20),8(16),10(15),10(16), 10(19),11(12),11(19),11(20),12(5),12(6),12(14),12(15),12(17),	Preference for knowledge that is fact rather than theory or opinion

	12(18),	
	3(13),3(14),3(20),3(23),7(6),7(7),8(1),8(13),11(2),11(5),11(8), 12(4),12(5),12(6),	Cultural expectation of information based learning & teacher centered teaching.
	3(14),3(15),3(17),5(6),5(11),	Ability to think outside the box influenced by cultural expectations of teaching & learning.
	5(5),5(11),5(12),6(5),6(6),6(7),6(13),6(14),6(16),7(4),7(7),7(12),7(20),8(13),8(23),10(13),10(14),10(15),10(19),12(5),12(6),12(7),12(8),12(9),12(11),12(12),12(13),12(14),12(17),12(18),12(23),	Not comfortable with an aspect of HSW
	6(7),6(8),7(2),7(4),7(5),7(7),11(3),11(5),11(6),11(7),11(19),12(4),12(5),12(6),12(7),12(10),12(11),	Inferred preference for traditional teaching
	7(2),7(3),8(1), 8(4),12(3),	Good teachers

Theme	**Participant & (Transcript Page)**	**Comment**
Cultural link & HSW	1(12),	Censoring of freedom of information. Ministry of Education.
	1(12),	Brain washing or coercion of narrow point of view.
	1(15),3(18),3(19),5(17),	Effects on freedom of thought & ability to discuss & formulate a point of view.
	1(16),5(15),5(16),5(19),6(17),7(14),7(16),8(17),10(15),11(15),11(16),12(18),12(19),12(20),	Impact of religious perspective.
	1(16),8(18),8(19),11(15),11(16),	Staying safe in your point of view.
	5(15),6(18),8(18),8(19),10(15),10(16),11(16),12(18),12(19),	Evidences & their precipitation of contradictions to belief systems creating uncomfortable thinking.
	2(1),3(5),3(6),3(19),2(2),	Closed mindedness & fear of alternative perspectives.
	2(2),5(15),6(17),10(19),12(18-20),	Difficulty of keeping religion out of ethical & moral discussions.
	2(13),	Teacher & students - collision of cultures.
	3(1),3(6),3(7),3(8),3(9),3(12),3(16),11(2),11(3),	Teaching methods here different to UK.
	1(19),6(21),7(3),7(13),7(20),10(13),10(14),10(15),10(19),11(20),12(5),12(6)	Learning factual information is easier.
	1(19),12(22),	Disparity between real world in UK & real world in Kuwait.
	2(11),6(19),6(20),12(8),12(9),12(21),	Enforced group communication and possible negative feedback to subject & activity. Second language issues.
	3(4),3(13),5(11),5(12),5(19),5(20),	Not used to HSW approach.
	7(4),12(12),12(13),	Reference to English as second language

Theme	Participant & (Transcript Page)	Comment
Staff issues & motivations		**Reasons for being Kuwait.**
	9(1),	Stress in UK.
	9(1),13(1),	Somewhere different to UK culturally
	9(2),13(2),13(3),	Relaxed lifestyle
	9(2),13(3),	Freedom from UK rules & regulations
	9(2),13(1),13(2),	Financial solvency
	13(2),	Some experience with Islamic culture
		Reasons for being in teaching.
	9(5),	A-level work
	13(),13(14),	Facilitation of learning
	13(10),13(11),	Helping students
		Frustrations of being in Kuwait
		Beurocracy
		Inefficiency
	9(4),9(5),13(4),	Kuwaiti national students
	13(3),	Lack of cultural activities such as museums, art galleries, theatres.
	13(3),	Ignoring their own cultural heritage in the rush to develop
	13(3),	Obvious corruption
		Frustrations with Edexcel course
	9(6),9(9),9(22),	Lack of academic content. Academic content replaced by HSW.
	9(6),9(7),13(12),13(23),	Perceived vagueness & ambiguity in Edexcel questions. Tension.
	9(6),	Practical's don't work
	9(6),9(16),9(17),9(22),9(23),13(20),	HSW vague, wooly, irrelevant to student needs & aspirations
	9(7),9(15),9(17),9(22),9(23),13(18),13(19),13(26),13(29),	Students having difficulty thinking outside the box
	9(7),9(8),9(11),9(13),9(17),9(21),9(22),13(6),13(14),	Lack of student engagement with the course
	9(8),9(9),	Reference to girls having lower motivation & aspirations
	9(9),9(10),13(12),13(26),	HSW compromising students achievement
	9(10),9(21),13(18),13(19), 13(23),	Students not happy with HSW
	9(13)	Skipping lessons
	9(15),9(16),9(23),13(19),	Students have difficulty with critical thinking

	9(15),9(10),9(16),9(17),13(6),13(7),13(8),13(12),13(15),13(16),13(19),13(20),13(21),	Students previously used to more formal curriculum & teaching
	9(18),9(19),9(20),13(27),13(28),	Discomfort when syllabus encroaches on religious thinking
	13(6),13(20),13(23),13(24),13(27),	Second language issues
	13(11),9(),13(12),13(16),13(24),	Assumes students live in UK. Association issues
	13(19),13(20),	Compromised implementation of HSW here
		Ideology & management issues
	9(3),9(4),9(5),	Left wing educational ideology & politics
	9(3),9(4),9(22),	School ethos
	13(5),	Staff feeling insecure due to Kuwaiti power dynamic
	13(6),	Disenfranchised staff & students
	13(8),	School teaching & learning policy development tensions
	13(8),	Long term staff with entrenched views
	13(8),	Pick & choose approach to UK initiatives without proper thought
	13(9),	Changing systems in response to accountability without proper developmental process
	13(9),	Change affected by political upheaval in UK
	13(9),	Lack of proper consideration for the cultural difference here
	13(10),	High staff turnover & lack of consistency & long term drive to school
	13(10),	Lack of support
	13(10),	Feelings of being undervalued
	13(10),13(11),	Poor communication
	13(10),	Lack of transparency
	13(11),	Lack of flow of positivity

Theme	**Participant & (Page)**	**Comment**
Cultural issues relating to Arab mind set or attitude	9(2),13(6),	Negative work ethic of Kuwaitis
	9(3),	Irresponsible
	9(3),	Reference to dependence on oil & no competition
	9(3),13(6),	Expending minimal effort
	9(8),9(9),	Discrimination against females
	9(11),13(22),	Unrealistic parental expectations of student performance
	9(11),9(12),	Education as a ticket to university & professions & status
	9(11),9(12),9(24),13(21),13(7),13(17),	Narrow minded view of education
	9(12),9(17),9(18),	Cultural clash between Arab mind set & Western ideology

		in teaching & learning
	9(17),13(2),13(30),	Culture of having everything done for you.
	9(18),13(22),	Tendency to think short term & not long term
	9(19),13(27),	Ability to engage with ethical, moral & social issues affected by religion
	9(22)	All must have prizes
	13(3),13(4),13(5),	Inequality according to family, occupation, or tribal origins
	13(4),	Family orientated culture
	13(4),13(5),	Kuwaiti power dynamic & perceiving themselves to be better, above reproach.
	13(5),	New found oil wealth feeding into Kuwaiti power dynamic
	13(6),13(7),13(8),13(16),13(17),13(22),13(29),13(30),	Arab perception of British Education as how it used to be. Traditional, didactic, note taking.
	13(6),13(7),	Arab culture of passing on information orally. Stories.
	13(7),13(16),13(25),	Didactic approach to teaching & learning supported by their way of studying the Quran.
	13(7),13(17),13(22),	Not understanding the Western perception of the value of education
	13(7),	Kuwait not investing in the education system
	13(9),13(21),13(22),	I want to see results now as opposed to several weeks or months later

Appendix 5k

Re-organisation of comments from phase I analysis into accessible themes for use in phase II interviews as probes and reaffirmation.

Compromised independence

Everything provided affecting ability to be independent.
Lazy, lack of work ethic, poor attitude to work & responsibility.
Others sit back while you do all the work in group activities.
Kuwaitis consider themselves better than others.

From sub theme: CULTURE & ATTITUDE

Restricted rights & freedoms affecting behaviour & independence
Feelings of discomfort with the Kuwait culture.
Sexism & male female interaction. Segregation issues.

From sub theme: CULTURAL LINK & SHELTERED COMMUNITY

Disparity between real world in UK & real world in Kuwait.

From sub theme: CULTURE & HSW

Impact of religion

Kuwait very traditional set culture influenced by religious perspective.
Sheltered from realities of outside world.

From sub theme: CULTURAL LINK & SHELTERED

Censoring of freedom of information. Ministry of Education.
Brain washing or coercion of narrow point of view.
Effects on freedom of thought & ability to discuss & formulate a point of view.
Impact of religious perspective.
Staying safe in your point of view.
Evidences & their precipitation of contradictions to belief systems creating uncomfortable thinking.
Closed mindedness & fear of alternative perspectives.
Difficulty of keeping religion out of ethical & moral discussions.
Teacher & students - collision of cultures.

From sub theme: CULTURE & HSW

Corruption & Politics

Kuwaitis think they are better. Wasta influence in society.
Corruption in politics & elsewhere
Teaching viewed as low esteem or status

From sub theme: CULTURAL LINK & SHELTERED COMMUNITY

Teacher & students - collision of cultures.

From sub theme: CULTURE & HSW

Information based learning & exam

Focus on need for subject & exam grades to go to university / profession. Parental pressure
Concern with unnecessary information.
Used to information based learning.
Desire to cover material quickly.
Preference for knowledge that is fact rather than theory or opinion
Cultural expectation of information based learning & teacher centered teaching.
Inferred preference for traditional teaching

From sub theme: ATTITUDES TO EDUCATION

Teaching methods here different to UK.
Learning factual information is easier.

From sub theme: CULTURE & HSW

HSW issues

Not used to HSW approach.
Perceived vagueness & ambiguity in Edexcel questions. Tension.
Preference for knowledge that is fact rather than theory or opinion
Cultural expectation of information based learning & teacher centered teaching.
Ability to think outside the box influenced by cultural expectations of teaching & learning.
Not comfortable with an aspect of HSW

From sub theme: ATTITUDES TO EDUCATION

Teaching methods here different to UK.
Disparity between real world in UK & real world in Kuwait.
Enforced group communication and possible negative feedback to subject & activity.
Second language issues.
Not used to HSW approach.
Reference to English as second language

From sub theme: CULTURE & HSW

Appendix 5m

Thematic statement & participant comments	**Participant & (Transcript page Reference)**	Frequency	%
My main goal from this course is to pass the exam and get the grade that I need.			
Partly agree	1(1),2(1),5(1),10(1),	4	44
Results determine future	1(1),11(1),	2	22
It is the main thing	1(1),1(3),2(1),3(1),5(1),8(1),9(1),11(1),13(1),	8	89
Goal of getting into a specific university course or job imperative	2(2),3(1),5(1),9(1),11(1),11(2),13(1),13(2),	6	67
Related to culture	3(1),9(2),9(2),13(4),13(5),	3	33
Parental expectation or pressure	3(1),9(1),9(2),11(1),11(2),13(1),13(2),	4	44
Status issues	3(2),9(2),13(2),	3	33
Set way of thinking, not open to other ideas	3(2),9(1),9(2),13(1),13(3),13(4),13(5),	3	33
Compromised education system due to attitude and money	13(3),	1	11
Some of the things we have to consider in the syllabus are unnecessary or make it more difficult.			
Add info that's not necessary	1(2),1(3),11(3),13(4),13(3),	3	33
You don't know if you will need it for the exam	1(2)	1	11
Gets in the way of studying	1(2),9(3),13(4),	3	33
Explaining in an indirect way	1(3),9(3),13(4),	3	33
You don't need it for the exam	1(3),13(4),	2	22
Makes you uncomfortable in some way	3(2),9(2),9(3),13(4),	4	33
Definitely agree	2(2),3(2),9(2),	3	33
Reference to specific component of HSW	9(3),	1	11

Thematic statement &participant comments	**Participant & (Transcript page Reference)**	Frequency	%
I am more used to learning factual information. I find this new way of teaching difficult.			
Agree with statement	1(3),1(4),3(2),3(4),5(3),8(2),9(3),10(2),11(3),11(4),13(5),	8	89
Reference to language difficulty in Edexcel	1(4),2(2),	2	22
Reference to narrow / different / unpredictable expectation for an exam answer in Edexcel	1(4),3(3),3(5),10(2)	3	33
Partly agree with statement	2(2),	1	11

Reference to tension on exposure to HSW (Confusion, scared, unsure, uncomfortable, difficult)	3(3),3(4),3(5),9(3),10(3),	3	33
HSW inappropriate preparation for exams sat by International schools	9(4),9(5),9(6),	1	11
Pressure from SLT to include skills based learning	9(4),	1	11
Lack of appreciation of significance of cultural differences	9(4),	1	11
People in Kuwait think T & L should be along more traditional lines			
Just wanting to get the information in Kuwait	1(4),2(4),3(4),5(4),5(5),9(4),10(3),11(4),	7	78
Passing the exam is the main concern	1(4),1(7),2(4),5(4),8(3),9(4),11(4),	6	67
Getting into college is important	1(4),1(7),8(4),9(4),	3	33
Education for understanding is not considered important or not understood	1(4),1(5),1(6),1(7),3(4),5(4),10(3),10(4),	4	44
Reference to Wasta & corruption related to educational achievement	1(5),1(6),	1	11
Reference to how the country is run and lack of work ethic	1(5),1(6),2(4),	2	22
Reference to parental expectations of traditional learning	1(7),2(4),3(3),5(4),8(3),9(4),9(5),10(3),10(4),10(5),11(4), 13(6),	9	100
Reference to parental pressure on students & teachers	1(7),2(4),3(3),5(4),8(3),8(4),13(6),	6	67
Reference to tension related to cultural / religious sensitivities	3(4),	1	11
Tension between SLT & staff	9(4),9(5),	1	11

Thematic statement &participant comments	**Participant & (Transcript page Reference)**	Frequency	%
HSW aspect of exam questions makes access more difficult			
Assumption that students are UK based culturally & environmentally	1(9), 3(8), 10(7), 11(5), 11(9), 13(7),	5	56
Kuwait students disadvantaged due to less exposure culturally & environmentally	1(9), 3(8), 10(7), 11(6), 11(9), 13(7),	5	56
Out of comfort zone	3(5), 3(8), 3(10), 5(7), 5(8),	2	22
Not used to HSW	3(5), 3(7), 5(6),	2	22
Wording of questions issues. Ambiguity. Vagueness	3(7), 3(8), 5(8), 9(6), 10(5), 10(6),	6	67

	10(7), 11(5), 11(8), 13(7), 13(8),		
Requirement to think on the spot	3(8),	1	11
Requirement to think beyond the factual content	5(7), 5(8),	1	11
Not just recall of factual information	9(6),	1	11
Difficulty engaging with HSW aspects of course	2(5), 3(5),	2	22
Parental / cultural influence on attitude / ability to engage with HSW	2(5), 2(6), 3(6), 3(8), 3(9), 3(10), 9(7), 10(8),	4	44
Cultural influence on some students affects group ability / willingness to engage with HSW	2(6), 3(6),	2	22
Conflict between members of group and cultural influence	2(6),	1	11
Sexism as a cultural issue affecting HSW engagement	2(6), 2(7), 3(8),	2	22
Wasta & family influence effecting perceived lack of need to participate	2(7),	1	11
Wasta & family influence perceived as potential threat in class participation	2(7), 2(8),	1	11
Competition as opposed to helping each other. Fight for survival more intense	3(6), 3(7), 11(7), 11(9),	2	22
Pre-occupation with status issues	3(6), 3(7), 11(6), 11(7), 11(9),	2	22
Beurocracy	3(9),	1	11
Narrow focus on perception of education / HSW unnecessary or irrelevant	3(10), 9(6), 9(7), 10(8), 13(9),	4	44
HSW compromises ability to succeed in exam	3(10), 5(8), 11(7),	3	33
Can't revise for HSW	3(10),	1	11
Feelings of frustration / helplessness	3(10), 5(7),	2	22
Contemporary ideology in conflict with cultural expectations	9(7), 9(8),	1	11
Isolation from UK	13(10),	1	11

Thematic statement &participant comments	**Participant & (Transcript page Reference)**	Frequency	%
Discussions involving ethical, moral, & social issues affected by religious thinking			
Conflict between evidences & religious conviction	1(9), 1(10), 2(9), 5(8), 5(9), 5(10), 8(6), 8(7), 10(9), 10(10), 11(10), 11(11),	6	67
Tension resulting from thinking about the conflict between evidences & religion	1(9), 1(10), 5(8), 5(9), 5(10), 5(11), 8(6), 8(7), 10(9), 11(10),	5	56
Reference to family & friends being unwilling to discuss this conflict or tension	1(9), 1(10), 1(11), 3(12), 11(11),	3	33
Reference to the religious perspective being the only one that is right	1(10), 3(11), 5(9), 11(11),	4	44

Evolution as a topic example causing tension	1(10), 2(9), 5(9), 5(11), 8(6), 9(8), 11(10), 11(11),	6	67
Reference to what others might think if one enters into open discussion	1(11), 1(12), 3(13),	2	22
Social & cultural pressure to conform to a particular perspective	1(11), 2(8), 2(10), 3(12), 3(13), 9(8), 9(9), 10(9), 10(10), 11(11), 13(10), 13(12), 13(13),	8	89
Ability to discuss social, moral & ethical issues compromised	1(11), 2(9), 2(10), 3(12), 5(10), 8(5), 9(8), 11(11), 13(11), 13(11),	8	89
Reference to illegality of discussing evolution in Kuwait	2(9),	1	11
Fear of education & free thinking leading people away from their religion	2(9), 2(10), 3(12), 5(11), 9(8),	4	44

Appendix 5n

Peer Reviewer - Trends in Phase II Transcripts

Participant 1

Trend 1: Exam Performance

- Learn to get the grade.
- Learn because you enjoy it and find it helpful.
- Textbook to wordy. Students always need alternatives e.g. video/notes that are easy to understand fully.
- HSW is an unnecessary extension to each topic.
- Time constraints to real learning and passion for the subject to materialize due to pressure of exams.

Trend 2: Preferred style of teaching and learning methods

- Just information taking for the test to pass.
- Not interesting in learning new ideas.
- Want it 'the easy way' attitude. Lack of care.
- Private school education for international students who care and want to go abroad.
- Parental attitude to learning to think/develop ideas is poor.
- Too much red tape hampers the students desire to learn around or extra.
- The different styles of learning VAK are very useful in learning.

Trend 3: How HSW is received

- HSW questions can be ambiguous. Students do not know what the questions are asking.
- HSW in some parts, students cannot relate to it as it assumes pupils are based in the UK.

Trend 4: Religious impact

- Conflicts with own beliefs/culture/family creates doubt in their heads.
- Very strong beliefs.
- No interest in discussing as it questions students' beliefs which is very uncomfortable for them. They feel pressured to believe in it.

Participant 2

Trend 1: Exam Performance

- Initial goal to pass, but from other students experience is that it is needed for university.
- Other elements of the course are of value, but that is not the main goal.
- Lack of interest in certain topics due to the relevance or usefulness to everyday life, also it hinders exam performance, although interesting.

Trend 2: Preferred style of teaching and learning methods

- Parental influence in educational techniques is heavy. They can stop students from learning due to more traditionally upbringing.
- Kuwaitis tend to have less information of the world, hence making answering questions harder.
- Female issues to education. Parents have a huge say in it, whether a girl pursues a career/education or not.
- Wasta Issues mean that there is no need for real progression in education, just pass and work for dad attitude.
- Creates mistreated of students. Elitism takes place in certain school situations to do with discipline.
- Students do not feel they can really give their opinion as they are afraid of someone with Wasta. This can have serious consequences if you are a non-Kuwaiti.
-

Trend 3: How HSW is received

- Makes it interesting and easier to take in and beneficially to exam performance e.g. debating provides extra knowledge.
- Parents and students do not want to do the extra work and want to only pass exams. It is not deemed to be needed and this forces teachers to adopt their method.
- HSW actually helps the students in answering questions by providing more information.

Trend 4: Religious impact

- Not allowed discussion on evolution in schools.
- Conflicts with the religion.
- Can create doubt in the minds of students.

Participant 3

Trend 1: Exam Performance

- Learning is an important process. Gaining skills for life.
- But most people/students will learn to pass an exam. Parental pressure and status play a part.
- Not open to ideas/changes and only one set way of working. Not interested in skill based learning.
- It is good to have a broad perspective of things when learning.

Trend 2: Preferred style of teaching and learning methods

- Traditional methods and tuition works with regards to passing exams. Since year 4.
- Change is difficult and makes them feel uncomfortable. They are not used to it.
- Lack of group work since year 8. Only been textbook work.
- There is parental pressure to learn and do well. There is status pressure and competition.
- Parents have a rigid/fixed way of thinking about occupations.

Trend 3: How HSW is received

- HSW element can lead to confusion. Difficult to just move away from factual learning. Out of their zone, not familiar with these ideas. They do not feel there is relevance to it. It makes it difficult to answer questions.
- Thinking on the spot is not something they are used to.
- Students feel left out from the experiences of learning HSW as they are not in the UK.
- Beurocracy with doing field trips.
- HSW questions make students feel helpless as to how to answer questions.

Trend 4: Religious impact

- Student's religions view affects their views on everything.
- Parental pressure/cultural affects how their views are shaped.

Participant 5:

Trend 1: Exam Performance

- Get grades. Study to pass the exam.
- Everything that is learnt in the syllabus is relevant.

Trend 2: Preferred style of teaching and learning methods

- Likes information based learning.
- Only wants the facts not theories.
- Parents only interested in learning to pass the exam.
- Not about gaining values from the school.
- Parental pressure for traditional teaching.
- Pressure to cover the syllabus quickly as time is short.

Trend 3: How HSW is received

- HSW questions more difficult than factual questions.
- Difficulty getting the full marks on HSW questions.
- Needs more common sense.

Trend 4: Religious impact

- Evolution conflicts with religious teaching.
- Writing answers to questions that don't agree with or believe.
- Fear that giving answers from Islamic perspective will lose marks.
- Strong religious view point not changed by the course.

Participant 8

Trend 1: Exam Performance

- Main goal is to learn to get the highest grade possible.
- Everything is useful in the course and it should be learnt.

Trend 2: Preferred style of teaching and learning methods

- Parents are not bothered how the information is being taught, so long as the child is getting the grades required.

Trend 3: How HSW is received

- Helps understand the topic more and it is easier.

Trend 4: Religious impact

- Creates confusion as they are being taught different theories/opinions to what they actually believe in.
- Creates conflict with beliefs i.e. evolution theory.
- They are concerned about what is being taught.

Participant 9

Trend 1: Exam Performance

- Kuwaitis see an exam as a passport to university.
- Parents see education as passing exams not to broaden one's knowledge of the world.
- Students study because their parents want them to study not because they want to.
- Parents have a high expectation of them to do either medicine or engineering, but they are not ready for such courses.
- Arab culture is that is that if you go to a British university then you have a high status.

Trend 2: Preferred style of teaching and learning methods

- Students find that the more traditional teachers find HSW work difficult to teach. Whereas, teachers straight from the UK deal with this better.
- Parents want a more traditional way of teaching and learning

Trend 3: How HSW is received

- Very difficult to implement as students think in black and white and find the grey areas difficult to think and interpret.
- Students find it difficult to think outside the box.
- It can hamper students getting a good grade in their exams.
- There is tension between school staff, those HODS who want to keep single science subjects separate and senior management who want a combined science KS3 course.
- The IGCSE is more like the O Level and it is more difficult than the GCSE. HSW is not straight forward recall of academic facts and it requires more skill based answers which students are not used to.
- Students find it difficult to think outside the box

Trend 4: Religious impact

- There are certain aspects of the course which should not be taught as it goes against government regulations, but schools have to as it is part of the syllabus. This creates tension for all involved.

Participant 10

Trend 1: Exam Performance

- Study to pass the exam.
- All the extra information learnt on the course may not be required for exam, but is relevant to look at the bigger picture.

Trend 2: Preferred style of teaching and learning methods

- Traditional way of teaching and learning is preferred because it works and students are getting the grade.
- If parents were taught the traditional route then they expect their children to be doing so. as it works for them.

Trend 3: How HSW is received

- The questions are vague when coming to answer exam questions.
- Ethical questions are difficult as if you were to give your true opinion you would lose marks in exams. This would be based on your religious and political views.

Trend 4: Religious impact

- There is no tension as students feel they are always learning and they have a strong religious foundation which is not altered by it.

Participant 11

Trend 1: Exam Performance

- Learn to pass and get high grades.
- Pressure from parents as boys need to do well.
- Greater expectations in Kuwait from parents, whereas in the UK you can be a shopkeeper say.
- They need to do well for status sake.

Trend 2: Preferred style of teaching and learning methods

- Parents expect a factual information based teaching and learning to take place.

Trend 3: How HSW is received

- Students in UK have different social habits and views and that would benefit those who doing IGCSE than someone who is from Kuwait.

Trend 4: Religious impact

- There is a tension when thinking about evolution and students owns religious thinking and beliefs.
- Students would not discuss it with family.

Participant 13

Trend 1: Exam Performance

- Kuwaitis are interested in getting the grade to get into university. They will repeat lots of times to achieve that goal.

Trend 2: Preferred style of teaching and learning methods

- Parents expect a traditional teaching method.

Trend 3: How HSW is received

- If English is a second language then it does make the HSW questions slightly difficult to comprehend.
- HSW is important, all be it difficult to understand for the students.
- Assumes pupils based in UK.

Trend 3: Religious impact

- There are tensions.

Appendix 5p

Transcript extract clarifying the three elements of the interview technique

Main question:

Q. Could you tell me something about your background, your nationality, how long you've lived in Kuwait, where you lived before, and how you came to be here?

OK, err … so I was born in London; my parents are British and so am I, we're originally from Kashmir, and I moved to Kuwait when I was eight years old because my Dad got a job here, and err … I guess I kind of like … I adapted to the culture and the teaching methods. They're different to the one's I was used to in England. Like they're … they're more err … they're not as involved, like not much group work, not much classroom work.

Follow up question: (eliciting more detail about an aspect of the answer to the main question)

OK. When you say that you err … adapted to the culture here, could you tell me a little bit more about that?

Well err … I … I … I guess, I think you have to, like in Year 4 when I came here I wasn't used to it.

Yeah.

Err … like … it's, it's very different from England. So … like this place is more … this place is more cultural.

Probe: (Obtain more detail & understanding of what an aspect of the description means to the participant)

What do you mean by that?

Err … you see a lot of … families and … it's more like, and I didn't really understand the language as well, so felt kind of … you know.

Further probes: (Refining detail that might speak to the research question)

Do you speak Arabic or not?

No. Not so … I don't speak Arabic (laughing). I never really immersed in the culture that much. I've always kind of stayed with the English speaking people.

OK. So when … when you said to me this place is more cultural, what did that mean for you?

Well … err … like it has, it has, the culture is still very like obvious here, there's not much of a … like there's traditions in this place.

Uhu.

There's people follow traditions, people believe certain things and I think religion affects it.

OK.

A lot … like in England it's so like diverse, you have so many different people, so many different … it's not, there's not actually like a set culture.

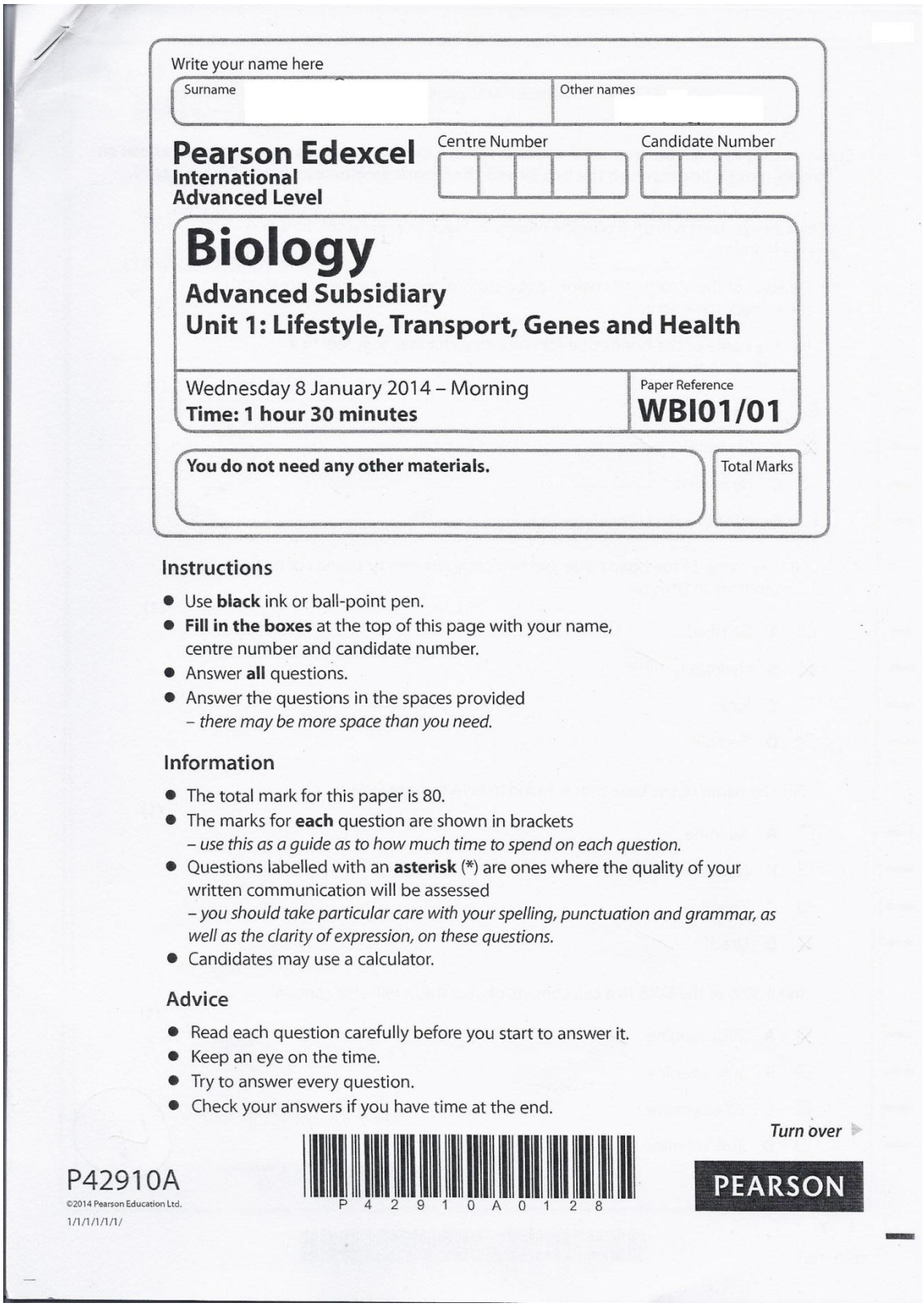
Yes.

So it was kind of like new getting used to that, just one set culture, one kind of idea.

Mmm … OK.

Appendix 6a

Example of examination question and answer



Write your name here

Surname | Other names

Pearson Edexcel
International
Advanced Level

Centre Number | Candidate Number

Biology

Advanced Subsidiary
Unit 1: Lifestyle, Transport, Genes and Health

Wednesday 8 January 2014 – Morning
Time: 1 hour 30 minutes

Paper Reference
WBI01/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – there may be more space than you need.

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
  – use this as a guide as to how much time to spend on each question.
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
  – you should take particular care with your spelling, punctuation and grammar, as well as the clarity of expression, on these questions.
- Candidates may use a calculator.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over

P42910A

1/1/1/1/1/1/

P 4 2 9 1 0 A 0 1 2 8

PEARSON

(b) Give **two** ethical or social issues related to the use of genetic screening for genetic disorders.

(2)

1 People argue that it is god's creation that no one should temper with.

2 How far will genetic screening go? and who sets the limit?

(c) Suggest why women with cystic fibrosis may find it difficult to become pregnant.

(2)

In the oviducts there's cilia to move the egg along. This cilia is kept smooth by mucus. A women with Cystic fibrosis will find it difficult to get pregnant because her eggs are getting stuck in the cilia due to the sticky mucus.

(Total for Question 8 = 8 marks)

TOTAL FOR PAPER = 80 MARKS

Question Number	Answer	Mark
8(a) (i)	B	(1)

Question Number	Answer	Mark
8(a) (ii)	C	(1)

Question Number	Answer	Mark
8(a) (iii)	A	(1)

Question Number	Answer	Mark
8(a) (iv)	A	(1)

Question Number	Answer	Additional Guidance	Mark
8 (b)	1. abortion / false positives / killing healthy fetus / eq ; 2. miscarriage / damage to embryo / eq ; 3. stress to parents / eq ; 4. social stigma of having disabled child / eq ; 5. other social issues	3. ACCEPT difficult decisions 5. ACCEPT availability / cost implications to health service or individuals	(2)

The question Marking Scheme for Q8b.